

CURRICULUM
DEPARTMENT

THE NATION'S SCHOOLS



THE MAGAZINE OF BETTER
SCHOOL ADMINISTRATION

Retirement Plans for Non-teaching

Personnel *T. G. O'Keeffe*

Bring Them Back to School . . . *Abdul H. Ali*

Teaching Religion in Public Schools

Is Playing With Fire *W. E. Clegg*

What Basis for Pupil Promotion?

William A. Johnson

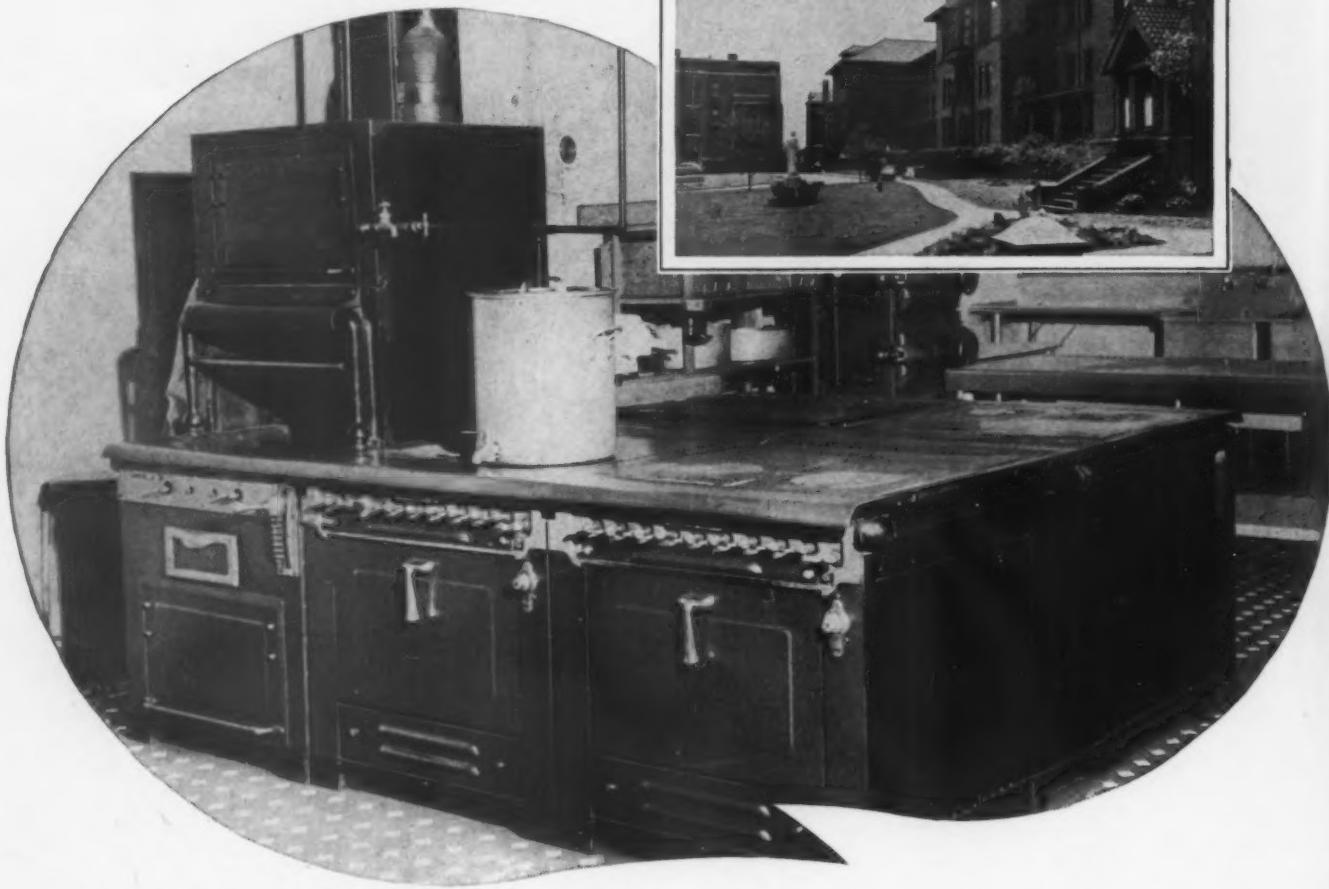
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JUNE

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HEADLINES

FOR POSTWAR PLANS

Congress has appropriated \$17,500,000 for loans to states, counties and cities for plans for postwar construction. More money will be forthcoming as soon as schools, through soundly engineered projects, apply in sufficient numbers. (Story on page 64.)

SCHOOL LUNCH BILLS

A compromise on opposing ideas on school lunch legislation may be reached through companion bills, S. 962 and H.R. 3143, introduced into Congress May 7. This two-title measure would provide \$100,000,000 annually to replace the current \$50,000,000. (Story on page 64.)

The U. S. Department of Agriculture appropriations bill for the fiscal year ending June 30, 1946, and including the sum of \$50,000,000 for school lunches next year, is ready for the President's signature.

SURPLUS WAR PROPERTY

Schools will benefit by a priority system announced by the Surplus Property Board which will give federal agencies and state and local governments the inside track. (Story on page 68.)

INTERNATIONAL EDUCATION

Recent proposals for an International Office of Education have been made in Congress by Representative Karl Mundt and Senator Fulbright and have been urged on the U. S. delegation at the San Francisco conference by educational groups. (Stories on pages 66 and 70.)

Eighty-four per cent of the people polled by the National Opinion Research Center, at N.E.A. request, ap-

prove of an international agency of education. Eighty-seven per cent would be willing to have schoolbooks in their city or county examined to see if the books are fair to all nations.

N.E.A. ON CHICAGO

A sweeping probe of Chicago schools by governor and legislature is sought in the N.E.A.'s 70 page report on its investigation expected to be off the press June 1. (Story on page 78.)

Supt. William H. Johnson and the "one-man rule" of James B. McCahey, president of the board, are lambasted.

PHYSICAL EDUCATION ACT

A bill, introduced May 6, would provide funds to assist states in physical education, health service and vocational guidance programs. Authorizing \$40,820,000, the bill would attempt to prevent federal control over educational policies. (Story on page 68.)

MILITARY TRAINING

Public hearings on postwar military training will be held June 4 to 16 by the Congressional committee on post-war military policy. Individuals, organizations, representatives of the armed forces and members of Congress will be privileged to state their views. (Story on page 66.)

FEWER DOCTORATES

A slump in doctorates has taken place since 1941. The smallest decline, however, has been in education, with a one seventh decrease.

PROGRESS IN NEW JERSEY

Educational reorganization in New Jersey becomes effective July 1. Rutgers becomes the state university and a new

state department of education will consolidate eight existing agencies.

FLOOR MACHINES AVAILABLE

W.P.B. restriction has been lifted on the distribution of floor maintenance equipment to schools as of May 11. With the revocation of Limitation Order L-222, all manufacturers of this type of equipment can again supply floor machines to schools without having to obtain a W.P.B. release.

SERVICEMEN'S CHILDREN

Authority and funds for the War and Navy departments to operate schools or to reimburse service personnel for tuition are urged by the *Army and Navy Journal*. Noncommissioned officers with several children can't afford the tuition fees charged by certain civilian public schools.

TEXAS TURMOIL

"Gravely concerned about the situation at the University of Texas," the executive council of the American Association of University Professors is continuing its investigation of the ousting of Dr. Homer P. Rainey and three economics instructors.

Whether the Texas turmoil is the forerunner of a nationwide "new and dangerous future" in which pressure groups will try to control education, only future investigations and developments can show, says Dr. Edward C. Kirkland, chairman of the committee on academic freedom.

WILL TRY ARMY METHODS

Phases of the Army's method of teaching French and Spanish will be tried experimentally at the University of Kentucky this summer.

For full news coverage of the month, see news section beginning on page 64.

Published monthly by The Nation's Schools Publishing Co., Inc., 919 North Michigan, Chicago 11, and 101 Park Avenue, New York City 17. Otho F. Ball, president; Raymond P. Sloan, vice president; Everett W. Jones, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$3; foreign, \$4. Current copies, 35c each. Member, Audit Bureau of Circulations. Copyright, 1945, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879.

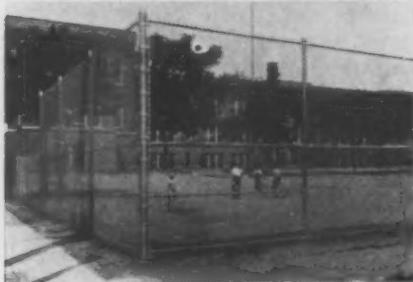
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CONTENTS

The Magazine of Better School Administration

Looking Forward	17
Henry Clinton Morrison, Master Teacher, <i>Arthur B. Moehlman</i>	19
Pictures Help Bring Them Back to School, <i>Ahdele Berg</i>	20
Education for Useful Living in the Postwar World, <i>C. E. Wilson</i>	23
New Patterns in Administration, <i>Paul R. Mort</i>	24
Retirement Plans for Nonteaching Personnel, <i>T. G. O'Keefe</i>	25
Project Stimulates Local Pride, <i>Clarice Cox</i>	28
What Size High School Classes? <i>School Opinion Poll No. 26</i>	29
Two "O.K. Tags" on Every Child, <i>Ralph W. House</i>	30
I Am a Second-Mile Educator, <i>Carl Kardatzke</i>	31
Higher Education in Modern Mexico, <i>George I. Sanchez</i>	32
What of Postwar Building Reserve Funds? <i>Harry N. Rosenfield</i>	41
War-Time Tenure of Superintendents, <i>Anton Thompson</i>	42
Teaching Religion in Public Schools Is Playing With Fire, <i>Edward O. Sisson</i>	43
General Versus Unit Shop, <i>Kenneth W. Brown</i>	44
Five-Point Salary Schedule, <i>G. A. Eichler</i>	45
Let's Book School Talent, <i>Lawrence A. Barrett</i>	46
Salvaging the Juvenile Delinquent, <i>A. M. Pitkanen</i>	47
New Emphasis on Morale, <i>Francis R. North</i> and <i>Ellsworth E. Tompkins</i>	49
What Basis for Pupil Promotion? <i>Walter A. LeBaron</i>	51

★ Schoolhouse Planning

Mass Models Do Selling Job, <i>Chester F. Miller</i>	34
Modern School for Negroes, <i>Albert G. Woodroof</i>	35
Growth of a Housing Project School, <i>Edward Ortiz Jr.</i>	36
Brick—an Ancient Material for Modern Schools, <i>Lawrence B. Perkins</i>	38

★ Audio-Visual Aids

Canada Lags in Use of Films, <i>Morley P. Toombs</i>	53
Demonstrates Use of Radio in School	54

★ The School Cafeteria

School Lunches Mean Better Health, <i>Margaret E. Brennan</i>	56
---	----

★ Plant Operation and Maintenance

Common-Sense Engineering Helps, <i>Rogers B. Johnson</i>	58
Better Plant Practices	60

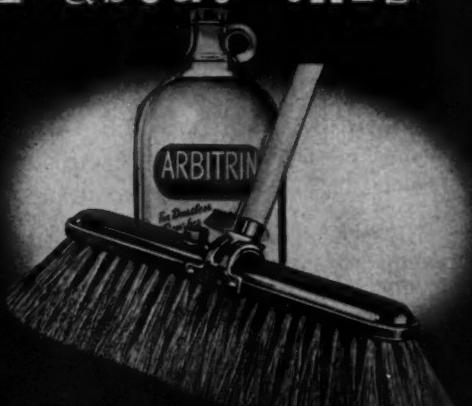
★ Regular Features

Headlines	3	News in Review	64
Questions and Answers	6	Superintendent's Bookshelf	76
Roving Reporter	8	Names in News	80
Chalk Dust	62	What's New	91
Index of Advertisers			
99			

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Questions —AND ANSWERS

Teachers' Unions

Questions: 1. Please let me know whether the teachers' union deals directly with the board or through a board committee or through the superintendent. 2. Are relations between schools and teachers' unions usually cordial? What have been the concrete results—in the way of revised salary schedules? 3. Have you any helpful suggestions for a superintendent in a city in which a union is being organized?—ILL., N. Y. and Mich.

ANSWER: Our union, in bringing such matters as salary adjustments before the board of education, usually follows the practice of first meeting with the superintendent of schools for preliminary discussion. This is followed by a joint meeting of the union, the superintendent and the board of education.

Relationships are cordial. The superintendent and board members are invited to the annual anniversary meetings of the union.

In my opinion, it would be unwise for a superintendent either to oppose or to encourage teachers' joining a union. Teachers are adults, should be treated as such and thus should make their own decisions regarding union membership. This freedom of choice is one of the things which in the past has made our country great. Let us retain this privilege, at least as long as we can exercise such privilege wisely.—C. L. CRAWFORD, Council Bluffs, Iowa.

ANSWER: Our board deals with the union through the superintendent of schools. The relations between them are cordial.

Concrete results have been a considerable revision in the salary schedule and several adjustments in working conditions. Of course, no one is able to know exactly how much of this is due to the teachers' union and how much to other influences. We also have a teachers' federation in the city.—CHARLES D. LUTZ, Gary, Ind.

Paying for Athletic Suits

Question: Can the school board pay for football, basketball and track suits out of the educational fund when this equipment is used in physical education classes daily in Illinois under a qualified teacher?—K.C.P., Ill.

ANSWER: There would be no question about such expenditures' being legitimate charges against the educational operating

fund. School districts can charge books, paper, motion picture machines and films, radios and any other equipment or supplies that are useful in the opinion of the school board and the administration.

The title to the suits would, of course, remain with the district and not with the individuals who wear them.—ALDEN B. MILLS.

How Can We Check Tardiness?

Question: We have a problem of excessive amounts of tardiness in our junior-senior high school. So far we have not been able to hit on any method of checking it to any great extent. We should appreciate suggestions of methods used successfully elsewhere.—E.L.M., Pa.

ANSWER: Tardiness results largely from lack of interest. We are least likely to be late when our destination is a matter of seeming importance. Perhaps school should open with significant activities which pupils would not want to miss.

An assignment of some responsibility, such as cadet service, should help to bring pupils to school on time. Studies show that most tardiness is among a small percentage of pupils. Case studies and good counseling might improve the attitudes of these individuals. Negative disciplinary measures rarely remove the causes of tardiness.—LOWELL P. GOODRICH.

Lure of Big Wages

Question: How can we best combat high school pupils' irregularity in attendance or withdrawal from school, particularly those who are lured away to earn big wages paid by employers who are indifferent to the best interests of young people and are willing to keep their businesses going at the expense of the educational training of youth? In this state, high school pupils are beyond the provisions of compulsory school laws.—W.B.N., Ark.

ANSWER: After every effort has been made to enforce school attendance and child labor laws, we feel that the best method for combating early withdrawal from school is the inauguration of an educational campaign directed toward pupils, parents and employers. In keeping with this point of view the U. S. Office of Education, at the beginning of the last two school years, has prepared and put into circulation "back-to-school" bulletins.

In addition, practically no August or September issue of *Education for Victory*, official publication of the Office of Education, fails to carry one or more articles, announcements or open letters urging pupils to return to school. Files of *Education for Victory* can be examined in an educational library.—CARL A. JESSEN.

Should Pupils Drive Buses?

Question: In these days of transportation difficulties, should high school boys be accepted as drivers of cars to transport basketball players?—M.M., Kan.

ANSWER: High school boys should be accepted as drivers of cars to transport basketball players only when they have passed a driving examination successfully and have shown that they have the ability and judgment necessary for safe drivers.

This should only be permitted in an emergency in which able and adult drivers cannot be obtained.—NEW MEXICO STATE BOARD OF EDUCATION, TRANSPORTATION DIVISION.

Substitute Teachers' Salaries

Question: How are salaries for substitute teachers determined?—J.E.G., Tex.

ANSWER: Substitute teachers' salaries in many situations are governed by supply and demand, especially where the service is temporary and incidental. Frequently, regularly appointed teachers especially adapted to substitute work are assigned to substitute service at schedule salaries. When the substitute is regarded as a probationary teacher, credit may be given for previous training and experience on a graduated schedule. One schedule of this type now in operation ranges from \$8 to \$11 a day by 50 cent intervals.—LOWELL P. GOODRICH.

Study Hall Period

Question: Many high schools throughout the nation are operating without providing a study hall period for pupils other than the supervised study within the classroom. To what extent is this being done and what are the arguments pro and con?—H.R.O., Calif.

ANSWER: Studies of regional associations show a great movement toward the lengthened class period so as to include supervised study. The longer class period makes for fewer periods in the day and a lessened need for study hall space.

At the present time, when great numbers of high school pupils are working before and after school, less study hall space is needed than in normal times. However, few schools have eliminated entirely the general study hall for pupils not otherwise engaged.

In these times it is sensible to excuse pupils from study halls so that they can work outside of school. It is not sensible to excuse them from study halls so that they can roam around the school building.—VIRGIL STINEBAUGH.

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Everyone Grows Potatoes

Our nation and our Allies will both benefit from such projects as the high school boys in Iowa Falls, Iowa, are promoting through vocational agriculture classes.

Take this year's seed potato purchase, for example. With normal conditions of weather, some 20,000 bushels of potatoes will be raised by farmers and victory gardeners in that community from seed cooperatively purchased by the high school boys. From 30 to 40 per cent of these growers never planted potatoes until the boys aroused their interest.

This is the tenth year the vocational agriculture pupils have pushed potato growing. In that time they have found out by experiment what seed is best adapted to the soil and climate of the locality. The boys travel about the town and country and take orders for seed potatoes, collecting a deposit on the order. This year 462 families ordered seed and two carloads of potatoes were delivered.

When the cars arrived, the boys sent out postcards to their customers telling them they had two days to pick up their seed potatoes. Those two days the boys and their instructor, C. E. Bundy, spent at the railroad siding, unloading the 1020 sacks, presiding over a vat of mercuric solution to protect the potatoes against disease (gardeners paid an extra 15 cents a hundred for this service, if they desired it), taking in the amounts due on each purchase and settling the freight charges. The boys did all these jobs efficiently and calmly, turning to Mr. Bundy only for advice when they needed it.

Duroc Center of Nation

Breeding and feeding hogs is a stupendous business at this Iowa Falls High School. The boys are organized into a Duroc Breeders' Association and through this association own cooperatively seven herd sires, including the Iowa grand champion boar.

The 44 members of this association (high school graduates can continue active membership in the association for three years through their Future Farmers of America chapter) own from one to 20 sows each. During the last breeding season they bred 360 sows and in six sales held since last August they have sold \$40,802 worth of pure bred Duroc hogs to farmers and breeders in 12 states.

Through the work of this one phase of the vocational agriculture program, the Iowa Falls community has become nationally known as a Duroc center. The boys have not only provided improved breeding stock but they have taught themselves, their fathers and the entire farming community proper methods of mixing feeds.

This school boys' Duroc Breeders' Association owns a membership in the Iowa Farm Bureau and in the Farmers' Cooperative Elevator.

Soybeans and Oats, Too

A third project of this remarkable department of vocational agriculture is its crops' and soils' organization. Its present task is the introduction of improved varieties of soybeans and oats into the community. Through repeated experiments the boys learn which strains will do best in their locality.

Little wonder that Iowa State College selects this high school as a center for practice teaching where senior students who expect to become instructors spend six weeks in observation.

Unique Junior College

The quaint and dignified plant of Ellsworth College, founded in 1890, stands one block away from Iowa Falls' beauti-



Members of the Iowa Falls Duroc Breeders' Association are proud of the seven herd sires they own.

ful and modern senior high school. The college founder died some years ago and left an endowment of 4882 acres of rich Iowa loam. Hard times hit the college and some of the land had to be sold. Even so, the heroic little college could not stave off defeat indefinitely.

By 1928 the citizens of Iowa Falls decided they needed a public junior college and voted to establish one. There stood Ellsworth, about ready to give up the struggle. In consequence, the school board decided to take a ninety-nine year lease on the buildings, grounds and equipment.

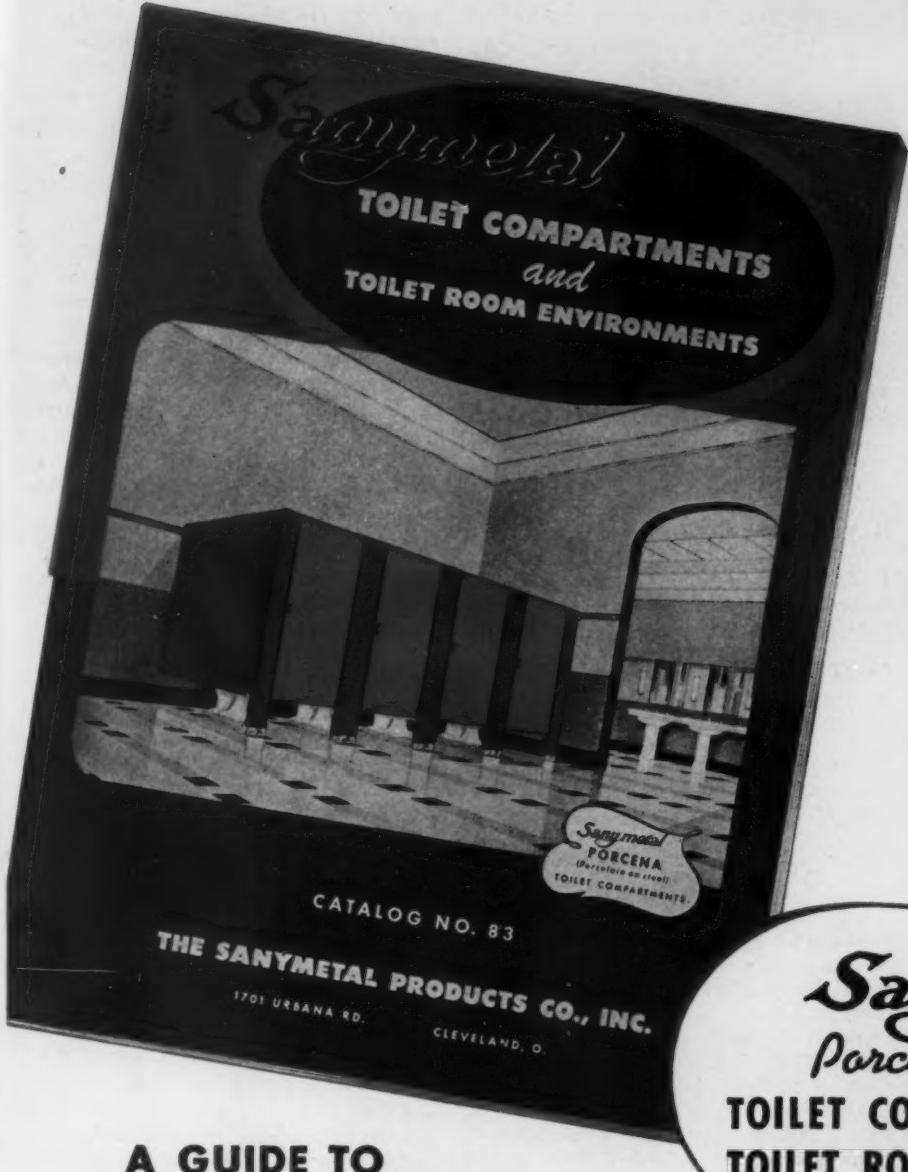
Of the founder's endowment, 2300 acres of farm land still remain. The board hires a farm manager and the income is used to maintain the junior college plant.

One other point about this junior college is its unique organization. It operates under a board of control, consisting of the superintendent of schools, the

(Continued on page 10)



Duroc association members haul away feed (protein and mineral) from elevator where they purchased and mixed 56,000 pounds.



A GUIDE TO TOILET ROOM ENVIRONMENTS FOR Impressionable Youth

In educational buildings of all types, more so than in any other type of building, the treatment of a toilet room environment is no longer secondary to the utility of the toilet fixtures. A late pre-war trend toward combining utility with appropriate toilet room environments is again in evidence in the planning of educational buildings for post-war construction.

Great strides have been achieved in the development of toilet room environments in keeping with other treatments of educational buildings. The toilet room should be one

of the most important rooms in the educational plant. Sanymetal "Porcena" (porcelain on steel) Toilet Compartments, of which there are several types, lift the toilet room environment into harmony with other appointments and equipments of educational buildings. Sanymetal Catalog No. 83 for 1945 illustrates Sanymetal Ceiling Hung and Standing Types of toilet compartments and appropriate toilet room environmental treatments. Send coupon direct to the factory if you would like a copy of this catalog for your reference files. A copy of this catalog should prove helpful in planning with architects.

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dean of the college and the dean emeritus. This board governs the policies of the colleges of arts, science and education and the conservatory of music. It's really quite a model junior college, it is said.

Teachers Are Plentiful

Twenty vacancies, 1000 applicants! It sounds like the depression days of the 30's but it was actually the summer of 1944.

At Iowa Falls teachers are plentiful and they are good; in his seventeen years in the town, Supt. C. M. Bartrug never had a better staff. Here is how he got them, for they came not alone from Iowa but from New York and Missouri and Minnesota and Nebraska.

Last spring as soon as vacancies for the coming year were reported, Mr. Bartrug started sending out mimeographed sheets listing the posts open and the requirements for the job. He mailed these lists to 52 colleges, universities, placement bureaus and teachers' agencies.

Applications began to pour in until they totaled a thousand or more. The delighted administrator picked 10 applicants for each opening and began to sift further. He called two candidates in for an interview for each job. When he decided in his own mind which he wanted to accept he started in on a campaign of persuasion, extolling the virtues of the community, the alertness of the school system.

Although the superintendent hired several from distant states, sight unseen, he failed to pick a lemon. His procedure was to call a school friend in that locality by long distance and quiz him carefully. "Would you hire this teacher for your own school?" was his final question and if the answer was affirmative and other points were successfully cleared up, Iowa Falls took the teacher.

For the new year and years to come the superintendent now has a backlog of applications for he does not mean to lose touch with the better material uncovered by his mailing pieces of last spring.

Rebinds Worn Textbooks

When W.P.A. projects ended in Fairfield, Iowa, not all of the services they provided were allowed to expire. In a small workroom adjoining the library of the community high school sits the same busy bookbinder who was employed with W.P.A. money. She more than makes her salary today by rebinding worn library books and textbooks which are rented to the pupils.

She also makes temporary backs for each of the 60 magazines which are in the library, lacing the new copies into the bindings as they are received.

EDITOR • Arthur B. Moehlman

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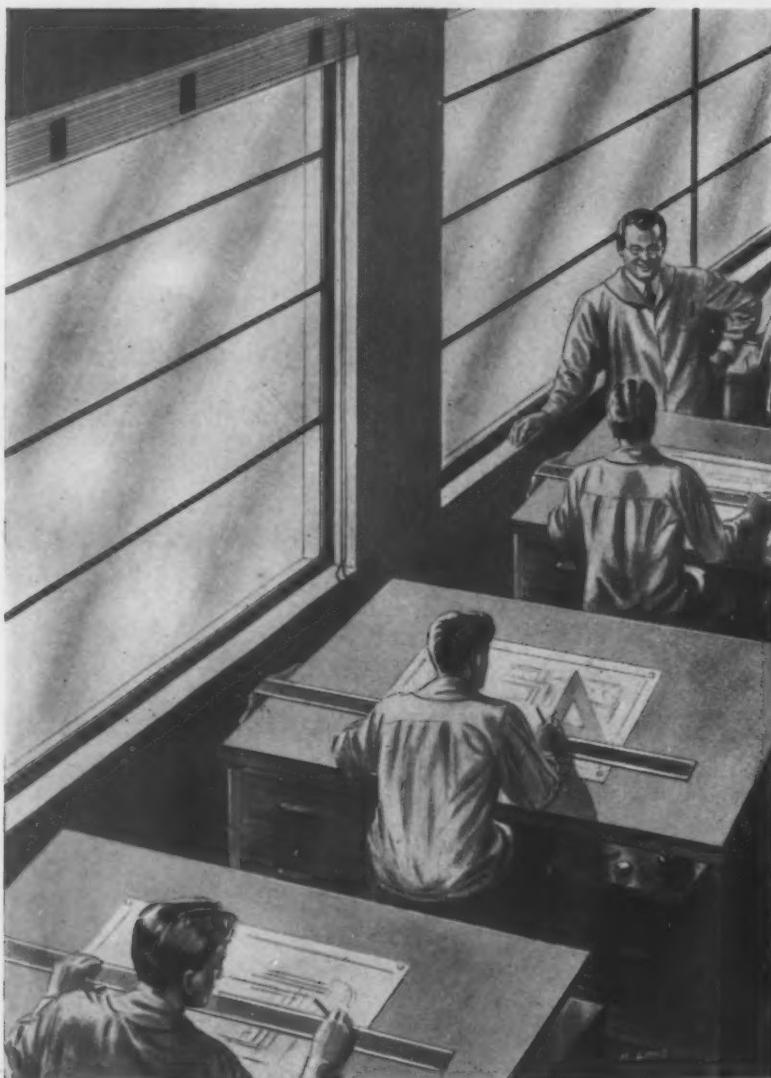
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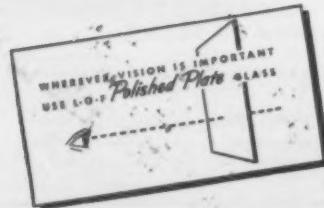
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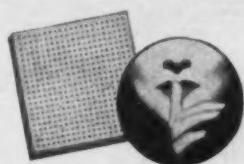
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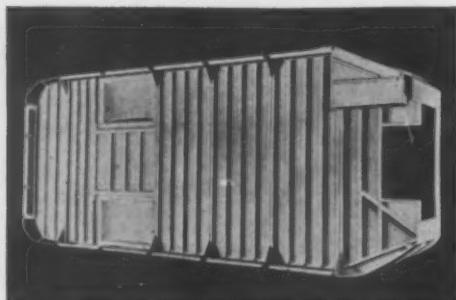
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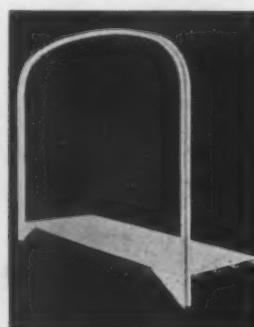
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LOOKING FORWARD

Tax Limitation Unwise

DURING the big depression several Ohio realtors decided that it was to their interest to limit taxation on real property. Using the "economy" psychology of the depression for orientation of their propaganda, these men obtained a constitutional amendment limiting state and local taxes on real property to 10 mills. Some states followed Ohio's bad example.

Today many states either through direct limitation on real property taxation or through several forms of individual exemption including rural homesteads, veterans' homes and homesteads in general have placed themselves in a difficult position. In some states real property is frequently undertaxed; in others personal property or intangibles generally escape just taxation and too frequently the chief burden for maintaining state and even local government falls on some form of the regressive and undesirable sales tax.

The scheme for limiting state taxes worked so well for certain interests that another heavily financed group is now attempting to obtain a constitutional limitation on federal taxation! This movement has taken the form of a proposed ceiling of 25 per cent on federal income, gifts and inheritance taxes during peace time.

This proposed amendment violates two of the fundamental principles of representative government. The first is that the people, directly or through their legislative assemblies at community, state or federal levels, should have the right to determine freely the extent and quality of public service desired and then to assess and to collect taxes to meet the popularly approved expenses of government. Specific limitations upon the right of a democratic legislative body to tax are thoroughly unsound in principle and unfair in practice.

The second fundamental tenet is that in a democratic commonwealth taxes should be levied "from each in accord with his ability." The proposed constitutional amendment would make it possible to tax only at the flat maximum of 25 per cent on incomes, gifts and inheritances and is thus designed to protect the owners of large wealth at the expense of the less favorably situated individuals.

Despite the obvious dangers of this proposal to limit federal taxing power, it has made considerable progress. Seventeen state legislatures have already approved resolutions which call on the Congress to provide a constitutional convention to fix the tax ceiling by a 22d amendment.

The chief proponent is the so-called Committee for Constitutional Government which is sponsored and supported by Frank E. Gannett, a reactionary Republican with a small string of newspapers. With Hearst, McCormick and Patterson he represents the worst in American journalism. He was closely associated with the America First Committee as an outstanding pre-Pearl Harbor isolationist. He later attempted through threat of libel against the publishers to frighten the E. P. Dutton Company from publishing John Roy Carlson's "Under Cover," the famous exposé of American fascist movements. One of the individuals prominently and extensively mentioned in this book is George Washington Robnott, now the active paid executive of Mr. Gannett's Committee for Constitutional Government.

Parents, teachers and good citizens, generally, should be made quickly acquainted with the grave dangers to representative government inherent in this proposal and provide the fullest possible publicity concerning both sponsorship and motive whenever the movement makes its usual quiet appearance.

Florida Proposals

THE preliminary report of the Florida Citizens Committee on Education is most encouraging. The tentative proposals are concerned primarily with a fundamental improvement of the education function instead of merely suggesting that additional sums be appropriated to the schools.

Additional state aid amounting to \$6,000,000 to equalize educational opportunity among the counties through the support of a foundation program is considered basic to all other aspects of the program. This program wisely recognizes that sums for capital improvement also are an essential and continuing part of the community program and makes provision for including partial support for buildings from state funds. Further plans for the early reduction in the size of

elementary school classes will improve instruction by making it possible for a teacher to work more effectively and will permit provision for individual differences. The extension of the school year to nine months, provision for better and more extensive supervision and raising the professional requirements for county superintendents to include college graduation are all points worthy of support.

In preparing its final report the Florida Citizens Committee on Education might recommend further strengthening of local organization. The currently paid executive-minded county board of education should be replaced by a nonpaid, popularly elected planning and appraising body of seven or eight members. The county superintendent could then be chosen by this board to serve as long as he was rendering satisfactory service. The board of trustees in small communities which now passes on the qualifications of teachers might better be abolished and the complete power to nominate, hire and supervise all personnel be centered in the county superintendent and the larger county board.

No Promises Made

RECENT articles and editorials in sectarian publications throughout the country to the general effect that the late President Roosevelt approved of divided school support appear to have little foundation in fact. The only occasion on which the President committed himself with respect to federal aid for education was in his last budget message to Congress.

Here is what he said on pages 13 and 14:

"As part of the budget . . . I am recommending reorganization of the basic structure of the Office of Education. This reorganization will facilitate service to the states in the development of a more adequate educational program with proper emphasis on all the various aspects of education.

"The training and educational programs . . . during this war have broadened our conception of the rôle that education should play in our national life. The records of selective service reveal that we have fallen far short of a suitable standard of elementary and secondary education. If a suitable standard is to be maintained in all parts of the country, the federal government must render aid where it is needed . . . but only where it is needed. Such financial aid should involve no interference with state and local control and administration of educational programs. It should simply make good our national obligation to all our children. This country is great enough to guarantee the right to education adequate for full citizenship."

In this budget statement the President approved of continued state and community control of public education and the giving of federal aid, not to all states on a professional political pressure basis but only to those areas in which aid is actually needed. Making educational opportunity available to all chil-

dren regardless of race, creed, color or social origin simply means the improvement and more adequate financing of public education possible through federal subventions. The public schools stand ready at all times to furnish all essential education for all children. They already furnish 90 per cent.

If the parents of some children for cultural, economic, political, religious or social reasons desire special educational facilities, they are privileged to exercise the right of protest at their own expense under full protection of law. There is no good reason why public monies should be used to support nonpublic independent educational agencies.

The states are completely competent to furnish essential educational services to all the children of all the people. The states need no partners. With all their weaknesses, the public schools are still the most nearly perfect agency evolved from the genius of the American people for the development of democratic ideals and democratic competence. It can scarcely be assumed on the basis of the late President's statement that he had any desire to weaken the democratic public school structure or to abrogate the principle of undivided school support.

Smith College Shows the Way

ADELAIDE CROMWELL HILL was graduated in 1940 with high honors at Smith College, Northampton, Massachusetts. She continued her graduate work at the University of Pennsylvania for the master's degree and is now working on her doctorate in sociology at Harvard University. In March 1945 she was appointed as a full-time member of the Smith College faculty where she will teach sociology beginning with the fall term. Miss Hill is a Negro and the first, in our recollection, to be appointed to full faculty status in a major institution of advanced learning. Smith College already boasts of one Japanese and two Chinese faculty members.

The action of the Smith College board of trustees is a significant one and deserves high commendation. State supported colleges and universities should be pioneers in breaking down the major racial, religious, social and sex barriers now so patently existing in this country. If the purposes for which we and much of the oriental world are fighting are to be more than wordy slogans, our popularly supported institutions of advanced learning might well demonstrate courage and leadership in their implementation.

Our American government has been built on the fundamental belief that there are no superior races and that the true measure of a man or woman lies not in color, creed or racial origin but in his or her contribution to human welfare and progress. These ideals need more rapid translation into practice.

The Editor



HENRY CLINTON MORRISON

Master Teacher

HENRY CLINTON MORRISON who died in Chicago on March 19 represented one of the last of a generation of sturdy and colorful leaders in public education. He was born at Old Town, Maine, on October 7, 1871, and grew up in the New England tradition of democracy and strong individualism.

Early Administrative Career

After being graduated by Dartmouth College in 1895, he began a teaching and administrative career of twenty-four years in the public schools of New Hampshire and Connecticut. Here he served successively as high school principal, school superintendent and, for fourteen years, as state superintendent. In 1917 he became assistant secretary of the Connecticut State Board of Education.

It was during his service in New England that Henry Clinton Morrison developed his simple and homely philosophy of American public education as something that grows vitally from the soil and that needs to be kept clear of nondemocratic foreign influences. He often decried the acceptance of the German elementary school during the 1830's as well as the general influence of German scholarship on American advanced education.

His reputation was so outstanding in 1919 that, at the age of 48, he was called to serve as professor of education and director of the laboratory schools at the University of Chicago.

During his nine years as head of the laboratory schools, Mr. Morrison developed and published "The Practice of Teaching in the Secondary School." This book, revised and republished in 1931, was probably the most widely read of his numerous publications. It also had considerable vogue in England. In it he attempted to develop instruction as something larger than the fractional day-to-day lesson that was one result of rigid gradation of the instructional process. Although frequently misunderstood, his theory of the instructional unit has been a basic and lasting contribution to improved classroom instruction.

Interest in School Finance

He was associated with the finance inquiry commission and was the author of "Financing Public Education in Illinois" in 1924. This study developed in him a deeper interest in finance that produced "School Revenue" in 1930 and "Management of School Money" in 1932. Both books were produced after his retirement as superintendent of the laboratory schools in 1928.

Retirement from active teaching in 1937 made little difference in his life or routine. He merely continued the development of an idea that had been in his mind for many years, an exposition of what he called the American common school. The first of this series, "The Evolving Common School," appeared in 1933 and

was followed in 1934 by "Basic Problems in Education." In 1937 he published "School and Commonwealth" and in 1940, "The Curriculum of the Common School." His last work, "American Schools: A Critical Study of Our School System," appeared in 1943. A number of educationists consider this book to be his most important contribution. Since it is the psychology of the teaching profession, particularly in administration, to center its praise and adulation on the activist rather than on the retired specialist, his recent works, in terms of circulation, did not receive the same attention as did his earlier books.

Henry Clinton Morrison was as sturdy a person as the rocks of his native state of Maine. He lived and worked according to his principles and was seldom swayed by passions or emotions. He did not understand nor would he practice the back-slapping, baby-kissing practices that became so large a part of opportunistic public school administration after 1915.

His Influence Was Deep

He believed in principles and ideas and could always be counted on to stand up strongly for what he believed, regardless of how much his stand annoyed the administrator. He never cared for personal popularity nor was he a follower of the crowd. Perfectly certain of his country's mission and of his own place in the general plan, he stood firmly against all diverting pressures or persons. His influence on public education was deep and will be felt for many years to come.—ARTHUR B. MOEHLMAN.



If the purely educational angle fails to interest a young person in returning to school, the "fun" angle may attract him. What youngster would not like to be part of a dramatic group such as this!

PICTURES HELP bring them back to school

AHDELE BERG

Assistant Publicity Director
Ohio Wesleyan University

ATTENDANCE in the nation's high schools since the beginning of the war has declined by more than 1,000,000.

This is an alarming figure, one which has prompted the U. S. Office of Education and the Children's Bureau of the Department of Labor to sponsor a "Go to School" drive for the second year. The entire nation, including O.W.I., the War Manpower Commission, school administrators, and communities as a unit, has been asked to cooperate. It seems reasonable, however, that any real influence in drawing the youth of today into the high schools must come from *within* the schools themselves.

At present in most schools there is no adequate medium of communica-

cation for establishing contact between the pupil *in* high school and the youth who *should be* in high school but isn't. One medium which can bridge the distance is the high school picture magazine, a project which has excellent possibilities for journalistic training.

Few think of pictorial journalism in connection with high schools. In reality, however, youths of high school age make up one of the most picture-minded groups in the country. They are the comic strip and movie fans. They are at the age when they besiege their parents for cameras and putter importantly in darkrooms. A picture magazine exclusively for this group is more capa-

ble of stirring up enthusiasm among teen-agers than are pamphlets, pep talks and newspaper promotion. As an agency for attendance promotion, it has been tried with outstanding success in a college in Ohio and there seems little reason why it could not work as successfully in high schools, particularly the larger secondary schools.

At Ohio Wesleyan University last year, the *Log*, a magazine filled with picture stories of the campus, was created for generating good feeling between the Navy and civilian students. An attractive, well-edited magazine, its pictures of Navy and civilian life on campus delighted students to the extent that sales of the first issue averaged one copy to every student. In addition, it was sent to

prospective students all over the country, many of whom are now on campus because of becoming familiar with Ohio Wesleyan through its pages.

One of the outstanding virtues of the *Log*, and one which must be considered in adapting this type of magazine to high schools, is the fact that it pays for itself. In the case of the *Log*, this was entirely because of the careful advance planning of each issue. The editor, Gerald W. Young, head of journalism and publicity at Ohio Wesleyan, plans his dummy so carefully that he knows to the page and pica inch what the magazine will contain before even one photograph is made.

Mr. Young determines the content of each picture, decides whether it is to be a vertical or a horizontal, gathers his props, contacts his models, all before the picture is taken. Thus, when the photographer arrives, he can make the shots for an entire issue over a week end. If 75 photographs are needed, never more than 100 are taken.

The editor finds that he can get good reproduction at low cost by using 110-line screen halftones on zinc, a thing rarely done in the publishing field.

Costs of the Magazine

The costs of the magazine are: photographs, \$125; cuts, \$300; printing of 2000 copies (page size 9 by 12 inches, printed on 70 lb. enameled stock), \$200.

And still the usefulness of the *Log* is not limited to the covers of the magazine, for, after making their debut in the publication, the photographs are released to newspapers, wire services, picture agencies, house magazine and book editors. Months after copies of a *Log* issue have been read and discarded, its pictures are appearing on covers of other publications or are used with feature stories in newspapers and bulletins and even on letterheads.

With little adaptation, the plan which has made the *Log* a successful medium for internal and external promotion in college can be used to create a highly effective high school picture magazine.

Many high schools today have



Pictures of girls who worked in summer and then came back to school will encourage others to return, too.



A picture such as this may interest a boy with a liking for broadcasting in returning to school in the fall.

darkrooms and equipment adequate to develop pictures for a magazine of this sort. If the school does not have the necessary equipment and a pupil photographer who can do the work, a professional photographer will do the job at a reasonable cost, if the dummy of the magazine is planned carefully in advance.

Pupil Editor and Faculty Adviser

If the high school administrators decide that a pupil should be editor of the magazine, he should work in close cooperation with a faculty adviser. For each issue, the editor and the faculty adviser should plan together the general content of the magazine, the number of pages, the number of photographs and the general, over-all picture of the school which they wish to present. After this, the editor can get together with his staff to work out a careful and complete dummy showing the exact size of each picture and the position it will occupy on the page.

Before even one photograph is taken, the picture stories should be worked out in detail. For example, the editor should know, and the dummy should show, that in the right hand corner of page 16, a vertical picture, 4 by 7 inches, will present Mary Smith in the home economics kitchen rolling out the crust for a lemon meringue pie which she learned to bake in her



Here is another picture designed to tell the story that there's fun to be had with the old group back in school.



The young person who is interested in one of the skilled professions, such as medicine, should be made to understand that time lost now will be hard to regain in later years.

first year's work in home economics.

A pupil can be given the job of making the appointments for pictures and seeing to it that they are kept promptly. Mary Smith, for instance, should be informed of the exact time and place of her appointment with the photographer. She will be there then, in the right kind of apron, with the right mixing utensils. The picture will be taken with no wastage of time or film and minus the usual frantic searching for ideas and props which characterize much high school photography.

The content of the magazine could run something like this: on the cover, the picture of a girl cheer leader or a grinning football hero; on the inside pages, pictures of what is being done in classes, in outside activities and in the halls between classes. Pupils could be shown in the library, in the chemistry lab, at the high school hangout, at junior and senior dances. An attempt should be made to furnish in each issue a representative over-all picture of activities in the high school and to present that picture in an attractive manner.

After the magazine has been printed, the next step is distribution. In the school itself, copies of the first issue will sell like hot dogs at a football game. What high school pupil will not pay a quarter to see his picture in a magazine?

Downtown newsstands will be eager to sell copies. The city library should have several. Subscriptions can be sold to local doctors and dentists who will put them in their outer offices. Copies can be sent to youth centers, settlement houses and recreation halls, lounges in defense plants. Some can be mailed directly to boys and girls of high school age who are known not to be in school. The youth of high school age who

is not in school and who picks up the magazine from one of these sources will realize, in looking at this attractive portrayal of high school life, that he is missing his educational opportunities and also the companionship and fun of young people of his own age.

The magazine's influence will not stop here, however. The parents of the youth may also see the magazine and realize with a jolt that Tommy should be getting a high school education rather than making a great deal of money in a job which, after the war, he probably will not be able to hold.

In addition, citizens of the community, those with no children of high school age, in seeing the magazine may become fully aware that there is a high school in the neighborhood, that it is doing a good job in molding future citizens of the community and that it needs whole-hearted support to continue that job.

Moreover, the pictures need not be limited to their use in the magazine. They can be released to local newspapers and wire services where they will reach one or all of the groups just mentioned. In so doing the picture magazine can create a sharp awareness of just how important a high school education is to the youth of today.

And that is what will send the boys and girls streaming back to the high schools for further training.



High school pupils will be inclined to think a long time before staying out of school when they see others performing such experiments as this one which will fit them for worth-while jobs in the postwar era.

EDUCATION for Useful Living *in the postwar world*

C. E. WILSON

President, General Motors Corporation

IN RECENT years, I have come to think of the education of individuals as falling into three phases:^{*}

First, the education for citizenship, broadly speaking, the education of young people as to their rights, duties and responsibilities in relation to others in order that they may have an understanding of the qualities of a good citizen and a good member of society.

Many consider this part of an individual's education to be the responsibility of the home and the church, while others feel that our primary schools also have a great responsibility in it. Some believe that it should be given real and continuing consideration in our schools and colleges. They fear an important opportunity is being overlooked.

Second, education that will give the individual a specialized knowledge and skill so that he develops the ability to do at least one thing well and can make a contribution to society in proportion to the rewards he expects to receive; in other words, education to qualify him for a job.

Education for a Job

Third, adult education, or the continuing process of broadening and increasing the useful or interesting knowledge that an individual possesses so that he may grow in usefulness and accomplishment and increase his satisfaction in living.

I have always believed myself fortunate in that my father and mother

*Part of the material presented here was first published in the May 1941 issue of the American Magazine. Permission to reproduce has been kindly granted.

were teachers in their earlier years. My father was the principal of a small, four room school in an Ohio town and my mother was one of the teachers in the school when they became acquainted and were married. As a result, I have never had any doubt but that a good education was worth striving for, even though neither of them was teaching when I was old enough to go to school.

Youth Must Decide on Life Work

Four or five years ago I was discussing with a friend the problem of educating young people, particularly our own children. We mentioned how difficult it was for them to decide on what courses to take and to develop sufficient perspective so that they could have a definite idea of what they would like to do.

I made the statement that if I could give my children five principles for daily living which they could understand and believe I would feel reasonably sure that they would have happy and useful lives. Later my friend asked me to write these down. Here they are.

1. It is important that you cultivate self-control and develop will power and determination, so that you do the things you want to do or should do rather than be controlled by your immediate environment and sudden impulses.

If you are tired and sleepy in the morning, can you get up and get to school or to work on time? Do you study your lessons when you know you should, or do you put them off to listen to the radio?

If you have not learned to control your own activities, to be your own boss, rather than let circumstances dictate to you, you can hardly expect to be placed in charge of the activities of others and direct them in their work or be competent to guide any form of business, social or political activity.

2. It is desirable and necessary for you to develop a tolerance of other people and of their opinions and activities. As a part of this, you must learn to be willing to use the same measuring stick on your own activities and actions that you apply in appraising others. In our modern society, where we are so dependent upon one another, where so much is accomplished by group effort, this is particularly important. Sports and other college activities not in the regular school curriculum help to develop this quality as does working with others in a plant.

Respect Truth and Facts

3. You should develop a proper respect for the truth and facts so that you will use the scientific approach to a problem rather than the dogmatic or superstitious one. This means that you make the rational rather than the emotional approach to all kinds of problems and have a full realization that the truth and facts will prevail.

4. You should keep promises and commitments. Modern business and most of our social relations are based on confidence and people are judged, perhaps more than most of them realize, not only by what they do but by what they do in comparison with what they have promised or stated they could do.

You should consider your responsibility to others by carefully appraising any commitments you may make, as it is almost as bad to make promises that you have little or no chance of being able to keep as it is to make promises that you do not intend to keep.

5. You should be willing to work and should realize that work is a reasonable part of life and not just a means to an end. You should be willing to make a social contribution in proportion to the social reward you expect. You should not expect your government to look after you individually. You can only have freedom and independence when you are qualified to look after yourself.

It is sometimes forgotten that in the last analysis in this country we, the people, are the government. The social contribution that each of us can make depends on our education, knowledge, experience, skill and willingness to work and cooperate with others.

There is also a sixth principle which I should like to have my children learn and understand. It is this: You must realize the importance of never being licked, of being able to maintain your morale and make the best of things, to push ahead with the adventure of life in spite of upset plans and temporary disappointments.

Some people are so upset by a rainy day, when they had hoped for sunshine, that the day is practically ruined. They do not seem to be able

to change their plans and still make progress when unexpected things occur. The spirit of not being licked, of realizing that life is an adventure and as such cannot be planned in complete detail, develops a willingness to play the game and still enjoy it, even though the rules are not to your liking or your position on the team is not of your own choice.

Several months ago, a group in Detroit was discussing postwar planning, during a meeting of the Committee for Economic Development, and I remember stating at the meeting that I would put down as No. 1 in my general scheme for post-war planning the importance of teaching in all of our educational institutions and through all of our mediums for adult education the principle that *every citizen should be*

willing and qualified through education, experience and work to make a contribution to the national economy in proportion to the social and financial reward he expects to receive.

This fundamental principle is of vital importance to our American democratic system. The citizens of our country, and especially the young people, must understand and believe in this principle so they will do their part in creating the sound postwar world we are all hoping for.

What are we going to do about this problem of the postwar world? There are several questions we must answer.

1. Do we believe in free enterprise as the best known system for promoting the development of our country and furthering the pursuit of happiness by its citizens? If not, what is the substitute?

2. Do we believe that the profit motive is an essential part of such system? In this connection I would give you my own definition of the profit motive: it is a device to promote efficiency and get the job done; a profit is the reward for a job well done for those who have invested their capital in the furtherance of the enterprise.

3. What are the weaknesses of the free enterprise system and what could be done to improve it without setting aside the fundamental principles on which it is based?

- 4. How can we explain our American system to our young people, and our oldsters, too; how can we criticize its weaknesses or its administration to the end that progress and improvement can be made without creating the impression that the system is fundamentally wrong and should be scrapped?

Recently I was talking to an uncle about the problems of the country and he said he had always remembered a remark made by one of his professors at Mount Union College in a class in political economy. The professor said that the real problem of a democracy could be stated in a short sentence: "What are we going to do with the idle rich and the worthless poor?" This was more than fifty years ago.

Some people seem to hold that the modern version of the problem is: "What are we going to do with the worthless rich and the idle poor?"

My answer to our big problem is sound education for all.

New Patterns in Administration

PAUL R. MORT

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IT is proposed that the home-rule concept be introduced into the theory of organization of city and county school systems. It would help remove present restrictions on creative staff members rationalized as on the outer edge of the line and staff chart. It would also help to break down the insulation of schools from the influence of the public mind in those situations where authority is too remote for easy access.

School boards of larger units should recognize the home-rule principle as well as the line and staff principle in fanning out the powers vested in them among the internal operating units of the school district. The result will be a combination of line and staff administration from the central office and administration in selected individual schools or groups of schools with present de facto home-rule administration recognized and extended somewhat.

For the local unit within the district it is proposed that the board of education create some sort of govern-

ing body selected by itself from laymen or from laymen and the school staff and that the principal or district superintendent act as a true superintendent of schools within the range of delegated powers. The interest of staff and public can be the chief consideration in determining whether or not home-rule powers shall be extended to any given school area.

Underlying these proposals are (1) the recent findings on what is emerging from first-rate teachers in the more favored school systems and (2) the findings concerning the influence of the public mind on the quality of schools where there is a ready channel for the flow of ideas outward from the schools and inward from the community.

The proposed change in orientation should stimulate the exercise of creativity of both staff and public. Minor adjustments currently being made to these forces are now viewed as empirically justified exceptions to the line and staff theory of spreading authority. So considered, they lack the stimulation of constructive theory. It is believed that these proposals provide such needed theory.

Abstract of an address prepared for the 1945 Chicago Conference of the A.A.S.A., which was canceled.

RETIREMENT PLANS for nonteaching personnel

ALTHOUGH 40 state legislatures have made provisions for statewide teacher retirement systems, only 10 states (Colorado, Kansas, Michigan, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, Washington and Wyoming) have provided retirement benefits for non-certified school employees in statewide retirement plans.

In the states of Michigan and Ohio, retirement systems for teachers and for nonteaching school personnel are provided by separate state systems. Retirement plans in the 10 states listed are of the joint contributory type which requires a contribution or deposit by the employee as well as the employer.

In addition to the states which have provided statewide retirement plans, the remaining states have enacted legislation permitting local political subdivisions to establish retirement systems. According to data compiled in 1941 by the U. S. Bureau of Census, which provide the latest available information on the subject, approximately 58 per cent of the 1,314,539 school employees in the United States had retirement protection. Out of a total of 1,314,539 school employees, there are approximately 328,000 nonteaching school employees.

Percentage Too Low

Therefore, since it is generally conceded that not less than 76 per cent of all teachers enjoy retirement protection in the United States, the percentage of nonteaching school employees covered by a retirement system is approximately 11.8 per cent, or 39,000 employees. Considering nonteaching school employees who are members of municipal retirement plans and school employees who have become members of retirement systems established since 1941, the percentage estimate of nonteaching school employees enjoying retirement provisions possibly should be in-

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Columbus, Ohio

creased to approximately 20 per cent.

The lack of coverage of the non-certified school employee is primarily due to two important factors: (1) the sincere interest of the general public in the classroom teacher who devotes her life to the education of youth and (2) the effective educational work of the National Council on Teacher Retirement and the National Education Association, in addition to the many state teacher associations.

Retirement Plans Vary

An examination of the state and local retirement plans operating in this country reveals a wide variation in retirement benefits and methods of financing the systems. There are two general types of retirement systems, the pension plan and the joint contributory plan.

Under the pension plan the entire cost of the retirement allowance is paid by the employer. Columbus, Ga., has this type of plan. It provides a retirement allowance equal to 50 per cent of salary at the time of retirement, provided the allowance does not exceed \$60 per month. The employee retires at the age and years of service set by the school board. Thirty years of service is required at present with twenty-five years with the city school system required.

By far the commoner plan is the joint contributory plan which requires a contribution toward the allowance by the employee and the employer. The Michigan and Ohio systems operate under this principle. Michigan requires a 3 per cent contribution with a maximum deposit of \$90 per year. Ohio requires a 4 per cent contribution with a maximum of \$80 per year.

Within the general category of the

joint contributory plan, there are two methods of financing retirement benefits by the employer. These are (1) the cash disbursement plan and (2) the reserve plan.

Under the cash disbursement plan the employers appropriate annually the amount of revenue required to meet the retirement allowances for the succeeding year. The reserve plan requires an annual contribution by the employer necessary to meet not only the current year's requirement for retirement allowances but also retirement benefits to be granted in the future. For example, in Ohio the employer is required to contribute 5 per cent of the pay roll exceeding salaries over \$2000 in order to meet the liabilities created by the employees who have already retired and to provide a reserve fund to meet liabilities for employees who will retire in the future. Rhode Island has the pension type of system. In that state the legislature appropriates the funds necessary to pay retirement benefits.

Points in Common

Most retirement plans have several points in common. First of all, there is usually provision for retirement with service requirements. Some systems require an employee to be 60 before he can retire; others will permit him to retire after completing a definite period of service, such as twenty-five or thirty years. A fairly common feature of a retirement system is to provide allowances for employees who become disabled before they reach retirement age. A comparison of retirement systems with regard to benefits and important provisions is found in table 1 on page 26.

For a number of years the National Council on Teacher Retirement and the committee on public employee retirement administration of the Municipal Finance Officers Association have published bulletins for interested public employe groups on

ways and means of establishing a sound retirement plan.

Both organizations point out that the establishing of a satisfactory re-

tirement plan requires careful study. Too often a retirement plan is adopted on the basis of copying the plan of another state or local system

without considering whether the provisions of the plan copied are suitable and without determining in advance the ultimate cost of the plan.

Table I—Selected Retirement Plans for Nonteaching School Employees*

Administration

Michigan: By Michigan State Teachers Retirement Board. Expenses paid from retirement system funds.

Ohio: Separate retirement boards of 5 members; 3 are members of system. Term, 6 years. Expenses apportioned among contributors, not to exceed \$1.50 each, annually. If inadequate, balance to be paid from income fund; if income fund is inadequate, balance from employer's fund.

Columbus, Ga.: City commissioners.

Hartford, Conn.: Pension commission: 3 electors of the city none of whom shall be an employee thereof or shall hold any other elective or appointive office in the city government. No more than 2 members shall be of the same political party. Term, 3 years; appointments made by mayor. City treasurer, ex officio member and secretary of commission, without vote.

New York City: Retirement board: president of board of education; comptroller of city; 2 members appointed by mayor, 1 of whom is a member of board of education; 3 teacher members; 3 teachers selected by contributors. Term, 3 years.

Employer's Contributions

Michigan: To be appropriated by state legislature; maximum not to exceed an amount which when added to balance on hand will equal the sum of \$500,000.

Ohio: Per cent of salary to \$2000 of each employee; further per cent for deficiency contribution; both per cents to be fixed by actuarial valuation.

Columbus, Ga.: No special fund.

Hartford, Conn.: Estimate of funds necessary is made annually for inclusion in city budget.

New York City: Per cent of earnable compensation of contributors plus \$100,000 a year for deficiency contribution to be continued until prior service liability is accumulated.

Employee's Contributions

Michigan: 3 per cent (maximum \$90 a year).

Ohio: 4 per cent (of salary to \$2000).

Columbus, Ga.: None. Pension plan.

Hartford, Conn.: Two and one half per cent for other than members of Connecticut Teacher Retirement System; 1½ per cent for all others.

New York City: Minimum, 3 per cent, based on service, sex and age. Such per cent, if less than 3, sufficient with interest to age 65 to provide annuity which, when added to pension, will provide allowance of 50 per cent of average salary for last 5 years.

Refund of Members' Contributions

Michigan: 1. In case of withdrawal—75 per cent of deposits, without interest.
2. In case of death before retirement—75 per cent of deposits, without interest.

Ohio: 1. In case of withdrawal—all deposits, with interest.
2. In case of death before retirement—all deposits, with interest.

Columbus, Ga.: 1. In case of withdrawal—pension plan; employees do not contribute.
2. In case of death—no provisions.

Hartford, Conn.: 1. In case of withdrawal—total contributions on request and in any case after 5 years from time of withdrawal.
2. In case of death—total contributions.

New York City: 1. In case of withdrawal—total contributions with interest, and, if member is dismissed, an additional refund is made of amount equal to his contributions prior to August 1, 1917.
2. In case of death—a death benefit payable to the estate of all contributors who have had at least 6 months and less than 10 years of city service, amounting to one half average salary. Five per cent added for each year of city service after 10 years, with a

maximum death benefit of 100 per cent of average salary. For members in service prior to April 10, 1929, an additional death benefit granted based on the number of years of prior service.

Provisions for Voluntary Retirement

Michigan: 1. Age—at age 60 with 25 or 30 years of service.
2. Years of service—15 years of service must have been in state, 5 immediately prior to retirement.

Ohio: 1. Age—at age 60 after 5 years of service.
2. Years of service—or after 36 years of service regardless of age.

Hartford, Conn.: 1. Age—men 60, women 55.
2. Years of service—after 25 years of continuous service immediately preceding retirement.
1. Age—men 65, women 60.
2. After 15 years of continuous service immediately preceding retirement, if so employed on May 5, 1927, or after 20 years of continuous service immediately preceding retirement, if so employed after May 5, 1927. Only local service counted. If involuntarily retired after reaching age of 50 and will be entitled to same retirement allowance as he would have been had he been employed to regular retirement age.

Columbus, Ga.: In discretion of commission (at request of school board, under an old law still operative, 30 years' service is required, 25 in city school system).

New York City: Age 65, after 35 years of service; or if employed subsequent to enactment, after 35 years of service with at least 20 in city.

Age of Compulsory Retirement

Michigan: No provisions.

Ohio: 70.

Columbus, Ga.: In discretion of commission (at request of school board, under an old law still operative, 30 years' service is required, 25 in city school system).

Hartford, Conn.: Men 70, women 65. The commission on written application of the department head may extend period of active service.

New York City: None.

Superannuation or Service Retirement Allowances

Michigan: Maximum, \$1200. Thirty years' service annuity equals one half average salary any consecutive 5 years. Twenty-five years' service, proportionate annuity; must have paid at least amount equivalent to first year's annuity.

Ohio: Annuity actuarially equivalent to member's deposits plus pension from state equal to annuity. One and one third per cent average final salary multiplied by the number of years of prior service credited, as additional pension for prior service, if eligible.

Columbus, Ga.: Fifty per cent of salary at time of retirement not exceeding \$60 monthly.

Hartford, Conn.: Annual allowance 50 per cent of average salary for last 5 years of active service on retirement with 25 years of service or less. Add 2 per cent average salary last 5 years for service over 25 years. Maximum, \$4000. Any employee at compulsory age without minimum service requirement gets 2½ per cent of average salary for last 3 years multiplied by total full years of service. The annual allowance is reduced by an amount equal to the pension, if any, which such member is entitled to receive from the state teacher retirement system by reason of the contribution or appropriation of state funds to said system. The amount of such reduction is to be computed on the basis of such pension being payable as a life annuity on the pensioner's life regardless of the option chosen by the member.

New York City: Annuity, the actuarial equivalent of accumulated deductions, plus pension equal to 25 per cent of average salary over last 5 years of service, or any 10 consecutive years; except if contributor has ren-

Table 1—(Continued)

dered less than 20 years' service, pension shall equal 1 per cent of average salary for each year of city service, plus pension for prior service, if eligible, but total pension shall not exceed 50 per cent of average salary.

Provisions for Disability Retirement

Michigan: 1. Service requirement—10 years, 5 immediately preceding disability.

2. Periodical medical examinations after retirement for disability—at discretion of board.

3. Disability allowance—as many 30ths of full annuity as years of service.

Ohio: 1. Service requirement—10 years.

2. Periodical medical examinations after retirement for disability—annually for 5 years at discretion of board.

3. Disability allowance—annuity having a reserve equal to the amount of the contributions plus pension sufficient to make total allowance of $1\frac{1}{5}$ per cent of final average salary, multiplied by the number of years' service, but not less than 30 per cent of final average salary and not to exceed .9 of allowance he would have been entitled to at age 60.

Columbus, Ga.: 1. Service requirement—in discretion of commission at request of school board.

2. Allowance and special provisions—50 per cent of salary at time of retirement not exceeding \$60 monthly.

Hartford, Conn.: 1. Service requirement—after 10 years of continuous service immediately preceding retirement if so employed on September 1, 1933, or after 15 years of such service if employed after September 1, 1933, and becoming permanently disabled from continuing to render the service in which he has been employed.

2. Allowance and special provisions—same as for regular retirement except that on injury in service employee shall receive 50 per cent of salary at time of retirement regardless of length of service.

New York City: 1. Service requirement—10 years of city service; medical examination may be required annually for 10 years after retirement or until age 65.

2. Allowance and special provisions—annuity equivalent to accumulated deductions plus a pension equal to 20 per cent of average salary, plus extra pension for prior service if eligible.

* Two of the systems analyzed in this table are statewide systems, namely, Ohio and Michigan. The other three states included in the table cover only school employees working within the school district.

Source: Bulletin by the research division and national council on teacher retirement, published by the National Education Association of the United States, entitled "Statutory Analysis of Retirement Provisions for Teachers and Other School Employees."

Public employees who are interested in obtaining a retirement system should form a committee composed of representatives from the employe groups, administrative officers and the legislative body which must pass on the final plan studied.

A great deal of literature is available on the subject and this should be studied carefully by the committee before any attempt to pass legislation is undertaken. Some of the matters that the committee must decide are as follows:

1. The personnel to be included under the plan.

2. The contribution to be made by the employee and the employer.

3. The requirements for the employe to meet before he is eligible to retire.

4. The type of benefits to be provided which would include a study of old age retirement allowances; duty disability benefits, paid on account of injury while off duty; survivors' benefit.

5. The method of financing the plan.

6. The form of administration of the retirement system. It is necessary to determine whether there shall be employe representation on the board of trustees and the administrative officials who shall aid in the administration of the retirement plan.

It should always be kept in mind that a retirement system costs money. Its ultimate success depends entirely upon whether there are enough funds available at all times to meet

the obligations set up when employes retire. Far too often retirement plans are placed in operation without adequate provision for financing them. To give some idea of the cost of a retirement allowance, table 2 shows the approximate cost of providing retirement annuities for certain ages, using a standard mortality table and interest at the rate of 3 per cent per annum. For purposes of illustration, an annuity of \$80 per month payable for life has been assumed and, to provide such annuity, the amounts shown in table 2 would be required at the ages stated.

Table 3 shows the illustrative cost

Table 2—To Provide \$80 Monthly as Life Annuity for a Male Employee

Retirement Age	Amount Required
55.....	\$13,200
60.....	11,400
65.....	9,600
70.....	7,900

Source: Municipal Finance Officers Association.

of salary payable monthly beginning at the ages indicated, after a certain continuance period of contributions, expressed as a percentage of level salary (the average salary for the entire period of service), assuming a 3 per cent interest rate, compounded annually, and based upon Men's Combined Experience Annuity Table and 3 per cent interest.

The percentages given in table 3 are predicated upon continuous contributions for the length of time indicated and an interest rate of 3 per cent, compounded annually, and mortality experience after retirement in accordance with the annuity table as described.

It should be considered that if contributions are made by the employer under a plan which does not provide for vesting of benefits so that retirement allowances are paid only to those employes who remain in service until the prescribed ages for retirement, the net cost to the employer for his share of contributions to the system will be decreased by the oper-

Table 3—Per Cent of Pay Roll Necessary to Provide an Annuity Equal to 50 Per Cent of Salary*

Period of Contributions	Beginning at Age		
	55	60	65
20 years.....	25.5%	22.0%	18.5%
25 years.....	19.0	16.5	13.5
30 years.....	14.5	12.5	10.5
35 years.....	11.5	10.0	7.5

*Average salary for entire period of contributions.

Source: Municipal Finance Officers Association.

ation of the factors of withdrawal and mortality.

It is far better practice to know approximately the cost of a retirement plan before it is placed in operation so that the employe, the public officials and the public are well aware of the obligation being entered upon. There is no short-cut method of meeting the cost of retirement benefits once they have been granted, unless the retirement benefit itself is

reduced after the employe retires, which method is unfair to the employe and places a responsibility of lack of faith on the part of the public.

Social security has been provided for most of the working men in the United States. Public employes do not benefit under this plan and there is no reason why it should be necessary to place them under social security because the responsibility of

providing retirement benefits for the aged or disabled is a proper responsibility of local government.

If retirement systems for non-certificated school personnel are to be established, a large share of the leadership must come from school superintendents and from the national and state teachers' associations whose vision and leadership have provided retirement systems for 750,000 teachers in the United States.

Project Stimulates Local Pride

CLARICE COX
Crawford, Neb.

A YOUNG person's love of country, which may be a noble but thoroughly vague sentiment, is frequently offset by dissatisfaction with, and even scorn for, the particular locality in which he lives. This feeling prevents him from gaining an understanding of his country. An undertaking to counteract this attitude was tried and found most successful in a small community in the state of Montana.

Pupils Had Little Local Pride

At a preliminary discussion in the English classes, few pupils could find much of interest or beauty in their locality, an area rich in history. They were not impressed by the austere grandeur of the rim rocks surrounding them. Grandparents were able to tell their grandchildren stories full of the tang of the early West but for the most part these tales were rejected as uninteresting and "just some more of Grandpa's yarns." The children agreed, however, to pretend one day that they were from the East and were viewing everything through new eyes.

After a discussion of the various avenues of interest discovered by this method, it was decided to carry through a program revolving entirely around the locality. Each pupil was to contribute to two of three projects:

1. A museum was to be established which would include articles or clothing used in the early days, Indian relics, fossils, petrified wood and other objects of geological interest, animal history items, furs, plaster

casts of tracks and similar objects.

2. A book of original work was to be assembled which would include a section of fiction, short stories and yarns; a section of nonfiction, local history, animal life studies; a section of poetry or cowboy songs; illustrations.

3. A program was to be given the evening the museum was to be opened featuring appropriate music, original skits and Western dances.

It was discovered that the aid of the teachers of natural science, art and music was needed to make the project a success. Although emphasis was to be upon original writings, music and art would certainly help to enliven the evening.

Everyone Cooperated

The big night came. One classroom was devoted to the museum and several of the boys who would otherwise have been the first to disrupt arrangements were functioning as museum guards. They did a perfect job, acting as guides and explaining the exhibits as well as watching them. One man whose hobby was collecting stones sent in his collection containing some really lovely moss agates. An elderly lady turned out to be an authority on Indian articles and contributed some museum-worthy pieces.

One of the star contributors was an old sheepherder to whom no one had ever paid much attention. His collection of fossils and petrified wood was amazing and the man himself attained a new stature in the eyes of the community. Plaster casts of

animal footprints, arrowhead collections, pictures of local interest and other objects were brought in by the young people themselves and it was through their soliciting that a really fine exhibit was on view.

The book was entirely the work of the pupils. Grandfathers were glad to tell their stories of early days to interested listeners who wrote them down and arranged them for the nonfiction section. An especially lively interest grew up in discovering the reasons for local place names, like "Horse Thief Canyon" and "Swimming Woman Creek." The pupils went all out in the fiction section, the main feature being Western humor of the exaggeration type. Illustrations were simple. The book was placed on a stand in the museum so that guests could examine it.

The program for the evening was short so that there was plenty of time for visitors to see the museum and the book. One original skit of two old-timers swapping yarns while twirling ropes was hilariously received. The music was rousing and put people in a happy mood.

Pupils' Attitude Changed

The whole event was well received by the community because it attracted attention to the reasons for local pride. Men and women, most of them elderly people, were given credit for their part in developing the life of the present and preserving the rugged memories of the past. The pupils saw their own surroundings with new eyes and found them good.

SCHOOL OPINION POLL

EACH MONTH A QUESTIONNAIRE IS MAILED TO 500 REPRESENTATIVE SCHOOL ADMINISTRATORS

What Size High School Classes?

SECONDARY SCHOOL classes should never be larger than 30 pupils to permit the teacher to give individual attention and yet stimulate class interest."

This statement by a Minnesota superintendent indicates the opinion expressed by the majority of the 500 superintendents queried in this month's questionnaire.

Of the 36 per cent who responded, the greatest number believe that from 20 to 30 is the optimum size for secondary school classes. These teacher-pupil ratios are in accord with The NATION'S SCHOOLS' poll on elementary classes which appeared in the April issue. Apparently administrators regard the classroom situation at the two levels as nearly identical.

For physical education, health and hygiene classes, superintendents believe that 30 pupils is the optimum number. A physical education teacher, however, checked "over 40" when her supervising principal asked her opinion. Many state that the size of the class is dependent on the facilities available and the size of the room.

Thirty-six per cent check 25 as the best size for language classes; the same percentage thinks classes for social studies should be limited to 30 pupils. Group discussion predominates in these classes, superintendents declare, but the classes should not be too large for an average teacher to handle.

"In mathematics and science I have found that more individual instruction is needed," writes a Montana superintendent, and two thirds of the superintendents believe these classes should not exceed 25 pupils. "It seems to me," says a superintendent from Washington, "that there is too much of a trend toward larger and larger classes. I wonder if this isn't why high school mathematics has received such a black eye."

Fine arts and vocational classes should be even smaller, asserts superintendents, for these classes are of a

laboratory type in which teacher aid and space to work are important.

Study halls can be larger, depending on the size of the room and the facilities available, say superintendents, but the questionnaire reveals a diversity of opinion concerning class size for library studies. Many believe that library work cannot be successful with

too many pupils in the room; others believe a small class is not important.

George F. Hall, supervising principal at Cliffside Park, N. J., sent copies of the questionnaire to teachers and principals in his school district and finds, with only a few exceptions, that the teachers prefer classes with no more than 25 pupils.

OPINIONS EXPRESSED ON HIGH SCHOOL CLASS SIZE

Health and Hygiene		Physical Education	
30 pupils	37%	30 pupils	28%
25 pupils	27	40 pupils	26
35 pupils	13	20 pupils	14
20 pupils	8	25 pupils	12
40 pupils	8	35 pupils	12
15 pupils	4	Over 40	8
Over 40	3		
Vocational		Science	
20 pupils	39%	25 pupils	37%
25 pupils	21	20 pupils	35
15 pupils	18	30 pupils	13
30 pupils	12	15 pupils	8
No answer	7	35 pupils	3
35 pupils	2	10 pupils	2
10 pupils	1	40 pupils	1
		Over 40	1
Social Studies		Fine Arts	
30 pupils	36%	20 pupils	26%
25 pupils	29	25 pupils	22
35 pupils	20	15 pupils	14
20 pupils	6	30 pupils	13
40 pupils	4	No answer	13
15 pupils	3	35 pupils	5
Over 40	2	10 pupils	3
		40 pupils	2
		Over 40	2
Mathematics		Languages	
25 pupils	34%	25 pupils	36%
20 pupils	18	20 pupils	28
30 pupils	6	30 pupils	15
35 pupils	4	35 pupils	9
40 pupils	2	15 pupils	7
10 pupils	1	10 pupils	2
Over 40	1	Over 40	2
		40 pupils	1
Library Studies		Study Halls	
30 pupils	18%	40 pupils	36%
20 pupils	17	Over 40	31
40 pupils	17	30 pupils	13
Over 40	16	35 pupils	7
25 pupils	12	25 pupils	6
No answer	8	No answer	5
35 pupils	5	10 pupils	1
10 pupils	4	20 pupils	1
15 pupils	3		

Two "O. K. Tags" on Every Child

LAST July a Congressional inquiry was set to determine why nearly 5,000,000 young men were mentally or physically unfit for military service. Senator Pepper of Florida, chairman of this subcommittee on war-time health and education, was quoted as saying, "It is a national tragedy that nearly 5,000,000 of our young men are unfit for military service at a time when the manpower needs of the nation are so critical."

The ingenuity and resourcefulness of our fighting forces on foreign battlefields are seldom questioned. One reads with pride the accounts of their heroic exploits. It appears that our public schools must have done something for these young men when they were pupils which is helping them meet the emergencies of the battlefields.

Schools Can Go Only So Far

The public school's major function is to guide boys and girls to a satisfactory solution of their problems so that their lives will be enriched with worth-while experiences. Problem-solving experiences prepare children to deal more adequately with the difficulties of adult life. It is not the public school's work to administer to children's basic physical and personality needs. School personnel is not trained for this task nor can it be expected to be trained for rendering highly technical service.

Two agencies could be created, however, with personnel trained and equipped to administer to the physical and personality needs of both preschool children and school children. Let us call them the Bureau of Physical Growth and the Bureau of Personality Development.

Each county could have a Bureau of Physical Growth and a Bureau of Personality Development equipped and staffed to meet children's needs. The bureaus would send their respective staffs in mobile units to every school in a county where special rooms would be available for the use of apparatus furnished by the bureaus.

One for physical growth, the other for personality development would indicate a child's readiness to enter school or to take up another year's work

RALPH W. HOUSE

Director of Child Study Clinic and Associate Professor of Education
Appalachian State Teachers College, Boone, N. C.

The Bureau of Physical Growth would cooperate with parents in preventing malnutrition. It would acquaint parents with the child's need for optimum amounts of iron, calcium, phosphorus, protein, vitamins, iodine and amino acids. The bureau would examine children for nutritional deficiencies and plan curative programs for correcting them.

Data collected thus far in World War II show that one out of every four young men examined for military duty has been rejected because of physical defects. These data point to the urgent need for a health program which will begin functioning before the two germ cells unite to form the nucleus of the child's body.

The Bureau of Physical Growth would sponsor a health program which would make the young women who will one day become mothers more aware of the importance of sufficient amounts of the nutritional elements in their bodies. A child wellborn would then be the result of science rather than of chance.

The bureau would assume the rôle of nutritional adviser for each new-born infant. Periodic chemical examinations of every child's blood would be made by the bureau and the findings recorded. Should these examinations present evidence of deficiencies in any element, the health specialists would plan a curative program. A federal inspector would annually review the records and impose heavy fines for negligence on the part of parents and health specialists who fail to take

the available steps to keep every child nutritionally fit.

Diet, disease, exposure and accidents cause physical defects which must be corrected. For example, the eustachian tube is shorter and has a larger diameter in childhood than in adulthood, making it possible for chronic sore throat to bring about an inflamed eustachian tube and middle ear resulting in hearing loss. Corrective programs would become a part of the bureau's health program.

The Bureau of Physical Growth would assume the responsibility for directing a longitudinal study of every child from babyhood to adulthood. These data could be studied by the bureau's health specialists and corrective programs put into effect so that weaklings, midgets and giants would tend to disappear.

Bureau of Personality Development

The second agency, the Bureau of Personality Development, would provide parent education planned to promote wholesome personality development in children. The bureau would help parents realize that tensions, complexes and frustrations are not desirable for personality growth.

World War II data thus far show that one man out of every 10 examined for military duty has been declared unfit because of mental quirks, probably the result of misguided personality development. In our armed forces are many young men who lack wholesome personality development but not to a degree that would lead a psychiatrist to reject them for service in battle.

A Bureau of Personality Development would assume the responsibility for informing parents about the findings of research in child growth and development. Children need guidance in regard to fear, sex, honesty, stealing, lying, bullying, teasing, daydreaming, imagination, love, jealousy, negativism and play. The bureau would have as its major responsibility the job of helping every child to adjust to life as he meets it.

Two O. K. tags on a child entering the first grade would signify to the teacher that here is a child who has both physical and personality readiness for school work.

When the same child enters school the following year, he would have two O. K. tags, signifying that he has both physical readiness and personality readiness for another year's work in school. Learning, it would seem, would then be acquired more

rapidly and effectively. Children with one O. K. tag or none would be assigned to teachers with special training to guide them through the year. Both bureaus would be on the job throughout the year, doing their best to help these less fortunate children achieve physical and personality readiness for school.

Billions for Hitler's defeat; how much for the defeat of malnutrition and personality maladjustment?

I Am a Second-Mile Educator

CARL KARDATZKE

Department of Education, Anderson College
Anderson, Ind.

LIKE other teachers and administrators, I try to keep up with educational books and reading matter. After wading through two fairly recently published encyclopedias in education* and underscoring sentences and making marginal notes, I feel I deserve the title of a "second-mile educator."

I was impressed with the strong imaginations of the contributors to these encyclopedias. They imagined that people would read what they wrote! I did, but I should not have begun this article if I had felt that even as many as 50 other educators had done the same. Most school people say with Francis Yeats-Brown: "To me the charm of an encyclopedia is that it knows—and I needn't." However, the discovery of what is being done in all phases of education throughout the world gives one a feeling of personal satisfaction.

I was amazed to discover in reading these encyclopedias the large body of current beliefs which contradict those we held only a few years ago. Recent research in the psychology of learning, mental discipline and the curriculum leads us to wonder whether Josh Billings was not right when he declared: "I honestly believe it iz better tew know nothing than tew know what ain't so." Cling-

ing so tenaciously to false ideas in education has stifled the intellectual curiosity and creative energies of our pupils and we have blamed them for their apparent stupidity. Teachers cannot escape the implications of this research.

I found repeated analyses of data that I had read before but with new light thrown upon them. Just because someone puts his ideas in the form of figures, graphs, charts or tables, with accompanying correlations, standard deviations or critical ratios, does not guarantee that he has proved anything that has universal application. The careful treatment of data is comforting to one who is wary of being misled by the wrong use of figures.

The "Encyclopedia of Modern Education" is especially valuable to the classroom teacher in pointing out the significant features of foreign school systems. These critical evaluations give one an orientation and a sense of balance in his work that are helpful in overcoming a feeling that the American way of education is the best.

Many of the articles conclude with a paragraph pointing out the areas of knowledge that have not been carefully investigated. The reader is told briefly what remains to be done, which is a valuable feature of research reports. Only rarely can one go into a problem so exhaustively that he can close the books on it as the investigator did who tried to produce a generation of tailless white

rats. He cut the tails off 99 successive generations, but the hundredth was like the first, with the usual long tail.

It is difficult to read reports of so many successful systems of education in operation all over the world, with the various aims and philosophies governing each, without being influenced by them.

With all the thousands of carefully controlled studies, most of which point to at least slight, and many to radical, changes in education, one would suppose that the world's educational systems would keep pace with what is being discovered on the educational frontier. That they are not is perhaps the most alarming truth revealed by reading these encyclopedias.

Why do we not keep our practice more nearly in line with current research? Our varied mind sets, prejudices and national biases interfere. The situation is similar to that of the two women sitting on a porch in the summertime. One was listening to the crickets singing; the other was enjoying the almost inaudible harmony of a choir in a near-by church.

"Aren't they singing beautifully tonight!" the one exclaimed.

"Yes," said the other, "and they tell me they are doing it with their hind legs."

To say the least, our common admiration of the American way of education must spring from widely different sources, if we actually do have a common admiration for it.

*Encyclopedia of Educational Research, W. S. Monroe, Ed., The Macmillan Company, 1941, 1344 pp. \$10. Encyclopedia of Modern Education, H. N. Rivlin, Ed., The Philosophical Library of New York City, 1943, 902 pp. \$10.

Higher Education in MODERN MEXICO

MEXICAN education, responding to that nation's complex cultural background and to her severe geographical limitations, presents a picture that is difficult to appraise.* The facts on Mexico's natural resources, terrain and economy reveal not only that she is poor but that the factor of geography has weighed heavily in determining cultural development in ways other than those usually associated with such material features.

The human factor, too, has evidenced peculiar manifestations in Mexico, manifestations which have tinged Mexican culture with variegated colors.

Nevertheless, within this complexity of material and human factors, close scrutiny reveals a coherent process of development, particularly with regard to education.

Mexico's educational foundations were laid in the sixteenth century, a century in which some of the finest features of the southern Renaissance, which had already reached its peak in Spain and was on the verge of decline, were carried over to New Spain. During this century, the lay and clerical leadership of New Spain reached out into virtually every field of endeavor with liberal and farsighted programs, of which many rivaled the best in Europe and some were centuries ahead of their time.

Education in Sixteenth Century

The printing of books in many fields; the founding of schools at all levels, from community nursery schools through an endowed, post-doctoral center of studies, and in all subjects, for both sexes, for *mestizos* and Indians as well as for Spaniards, and the use of native languages in schools and books suggest the progressive and inspired character of intellectual endeavor in sixteenth century New Spain.

Because of various factors, how-

ever, this widespread spirit of cultural crusading rapidly declined after the end of the century and the next two hundred years of the colony were highly conservative and uninspired. The influence of the foundations laid in the sixteenth century has nevertheless persisted to the present day and an understanding of those foundations is indispensable to an appreciation of the course which Mexican education took in the nineteenth century and, of greater moment, of the course it has taken in recent years.

Three Outstanding Institutions

The salient features of the development of higher education in Mexico are illustrated clearly in the history of three outstanding institutions: (1) the Colegio de San Nicolás Obispo (now the Colegio de San Nicolás Hidalgo, preparatoria of the Universidad Michoacana at Morelia), founded in 1540, which is today the oldest institution of higher learning in the Americas and which, since the days of Bishop Quiroga, its founder, has upheld liberal academic and political principles and has trained many of Mexico's most outstanding progressive leaders, Hidalgo, Morelos and others; (2) the Real y Pontificia Universidad de México (now the Universidad Nacional Autónoma de México), which has served Mexico well as a conservative, humanistic university of the traditional type since it opened its doors in 1553 (founded by the decree of 1551); (3) the Colegio de San Ildefonso (now the Escuela Preparatoria of the Autonomous National University of Mexico), created during the last years of the sixteenth century by the merger of several Jesuit colleges founded in 1575 and 1576. This institution existed for some two centuries as a typical Jesuit college and, after a half century of stagnation and decay, was transformed in 1867 into a school reflecting the positivistic philosophy of Comte, becoming in 1910 the preparatory school of the university.

GEORGE I. SANCHEZ

Professor of Education, University of Texas

Each of these institutions arose out of a distinctive theory of higher education and each has made its contributions in laying the educational foundations of Mexico. Each in its own way has responded to the complex factors which have operated in Mexican history. Making its adjustments to these factors, each school has brought to the present day a significant heritage which, gradually blending with that of the others as well as with modern tendencies and norms, sometimes determines, and nearly always conditions, the course of higher education in Mexico today.

Today, Mexico is seeking to modernize her higher education. The humanistic verbalism of the past is slowly being modified in curriculums which are giving an increasingly important place to the laboratory sciences, to new professions and to research. The older schools, handicapped by the weight of tradition, have not moved as rapidly in these new directions as have institutions of more recent creation, such as the Instituto Politécnico Nacional, the normal schools and a variety of special centers of training and research.

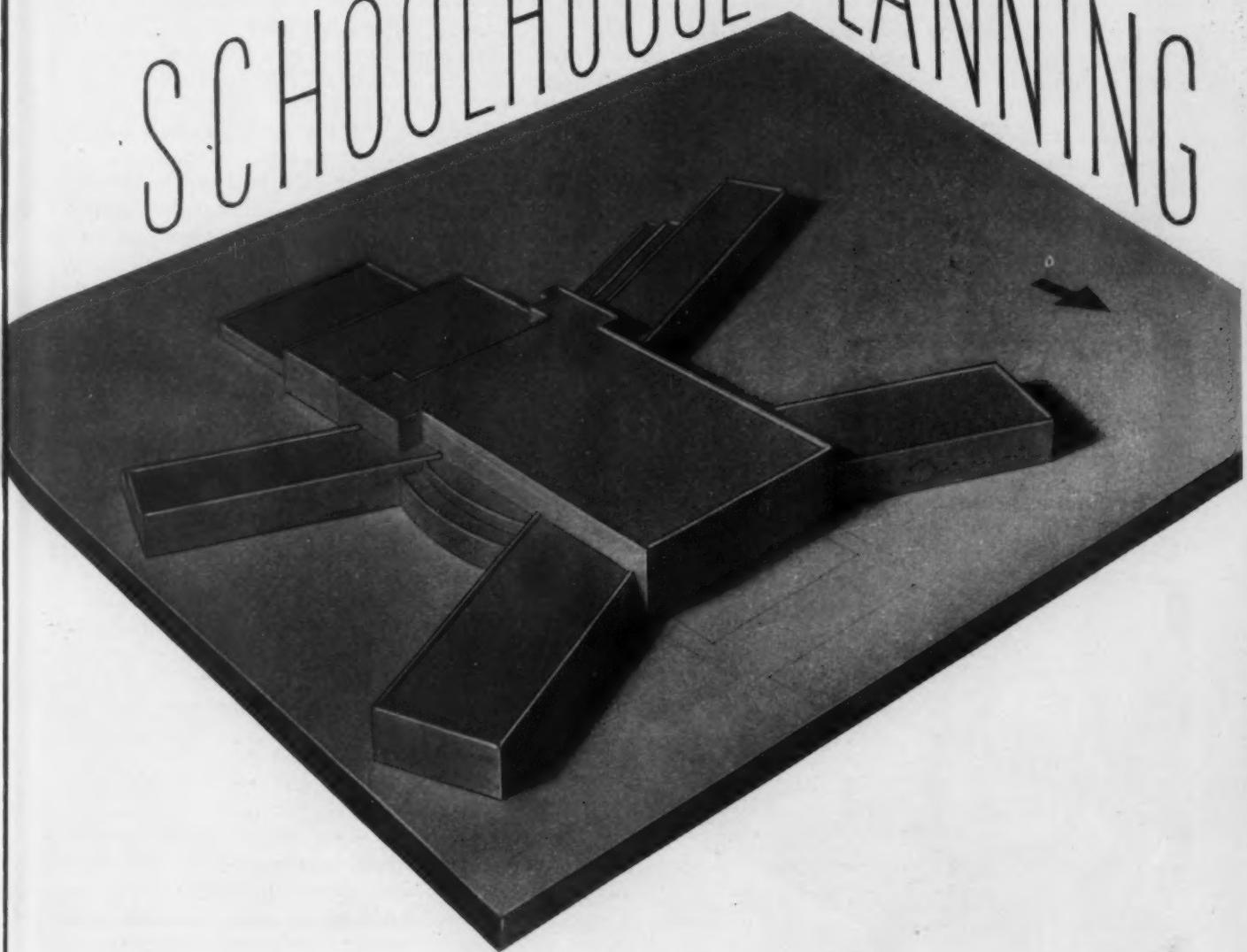
Old and New Mingle

Inevitably, the modernization of schools must rest, in part at least, upon old educational foundations. This is particularly true of Mexico where, for more than four hundred years, higher education has constituted an important feature of cultural development.

The task of selecting the worthwhile from the undesirable among the variety of old norms and achievements in education is one of the principal problems confronting Mexico. In "The Development of Higher Education in Mexico," I have sought to present a rapid survey of Mexico's cultural foundations and of her current efforts to expand education, efforts which sometimes yield to and sometimes ignore traditional ideals and practices.

*Sánchez, G. I.: *The Development of Higher Education in Mexico*. Introduction by James T. Shotwell. New York City: King's Crown Press, 1944. Pp. 140.

SCHOOLHOUSE PLANNING



Mass Models Do Selling Job

CHESTER F. MILLER

Superintendent, Saginaw, Mich.

FOR some time, modern designers have been using mass models of structures. Despite the success and experience of designers in other fields, school officials and school designers have been slow in adopting this means of presenting plans to boards of education and to the public.

Projected school buildings must have the enthusiastic support of the board of education and the community if they are to become a reality. It is imperative, then, that the plans be presented to them by methods that will engender general enthusiasm. Too much detail in the initial stages of a project is confusing and often results in arguments, misunderstandings and criticism that dampen enthusiasm and even may lead to the defeat of the entire plan.

A clear-cut program expressed in simple form saves many an hour of

explanation. You may have countless extraordinary drawings supplemented with blueprints, only to have the initial impression defeat a perfectly sound building program. It has been my experience that the average school board member and layman is confused by a set of blueprints. Because of his inexperience, he finds it difficult to visualize a building even from a simple set of room layouts. The uninitiated are too often interested only in exteriors.

To obviate this difficulty, I have found that the preparation of a mass model of the building (built to scale) is the best initial step. Around this nucleus, the whole plan can be unfolded. It helps if the building is oriented on a piece of wallboard. The model should be mounted in accordance with the direction the building is to face and the streets should be specified, if possible. This

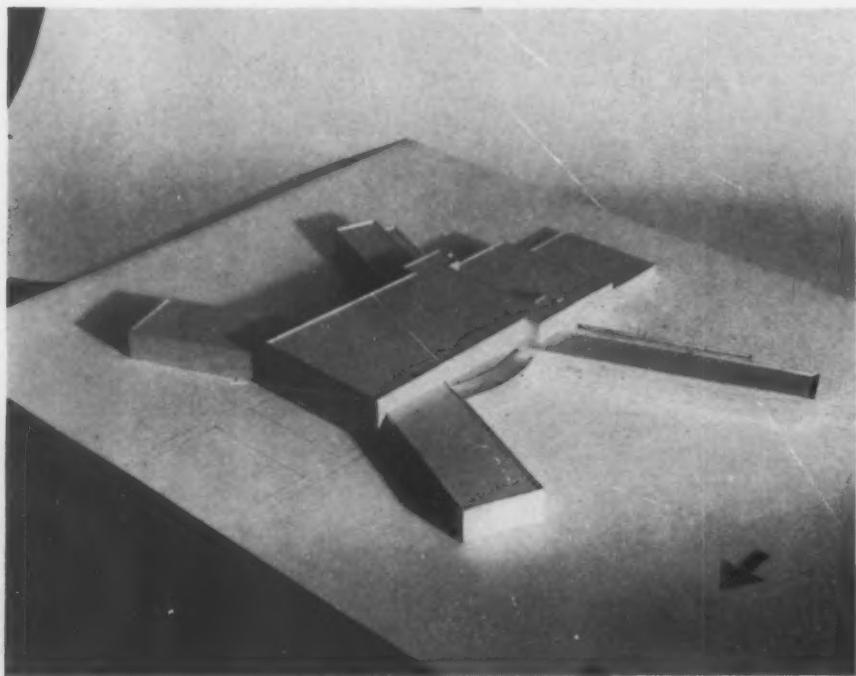
directional arrangement of the structure on the site should take advantage of the best natural light which the location and building arrangement will permit. The preparation of a plain mass model will obviate argument or misunderstanding before curriculum studies and room layouts are explained in relation to the model. Obviously, the next step is an explanation of the blueprints before any attention is given to specifications. The isometric aerial perspective of a proposed new high school is shown in the illustration below and on page 33. It is the final step in the educational designing of the building.

The site on which this building will be located consists of 82 acres of land. The building and grounds will be designed and developed for the purpose of preparing pupils mostly for industrial and agricultural pursuits. The wings are splayed so as to give adequate natural light to the classrooms. The center unit is three stories high with a cafeteria, a band room and a music room on the third floor. Offices are located on the first floor front and the stadium type auditorium is located directly back of the offices. The rear middle section contains, first, the gymnasiums and, last, the swimming pools.

The single story circular units between the wings joining the middle unit are library-studies. Classrooms are located in the two story wings. One wing is wider than the others so as to provide additional capacity for vocational shops.

In the next step, it is easy to synchronize the classroom layout with the mass model. Referring to the model and studies of educational and curricular needs, many such problems as density of traffic movement can be studied. When the educational designing has been studied and approved by the board of education, everything is ready for the architect.

Never, before using this plan of "selling" a new building, have I had such understanding discussions, intelligent questioning and interest in plans shown by board of education members and laymen.



Models by John Henry Moehlman

Models are more understandable to the layman than blueprints.

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Summerfield Negro School, Guilford County, North Carolina.

Modern School for Negroes

ALBERT C. WOODROOF
Architect, Greensboro, N. C.

THE present Summerfield Negro School building, in Guilford County, North Carolina, replaces one which burned and the original foundations (to some extent) were re-

used, although the plan is rather different. The original boiler room, fuel room, area steps and boiler were not destroyed and were re-used.

The auditorium wing is a future consideration, since the W.P.B. would not permit its construction during the war-time emergency; it will, therefore, be a postwar project. Otherwise the project is complete.

CONSTRUCTION DETAILS

STRUCTURE: Footings and slabs, concrete. Foundations, brick. Superstructure, brick veneer.

ROOF: Wood framing and deck, dead level, covered with twenty year bonded, five ply asphalt and asphalt saturated felt, gravel coverage. Rock wool insulation between all ceiling joists.

WINDOWS: Standard double hung, $1\frac{1}{4}$ inch sash, cast-iron weights and cotton sash cord.

FLOORS: Tupelo gum, finished with penetrating varnish-wax product.

WALLS: Wood wainscot, 7 feet high in corridors, window stool height in classrooms, finished with wax-finish penetrating varnish in medium brown. Plaster above wainscot painted in soft blue-green throughout.

CEILINGS: Fiber board tiles, 16 by 32 inches.

LIGHTING: Semi-indirect fixtures throughout.

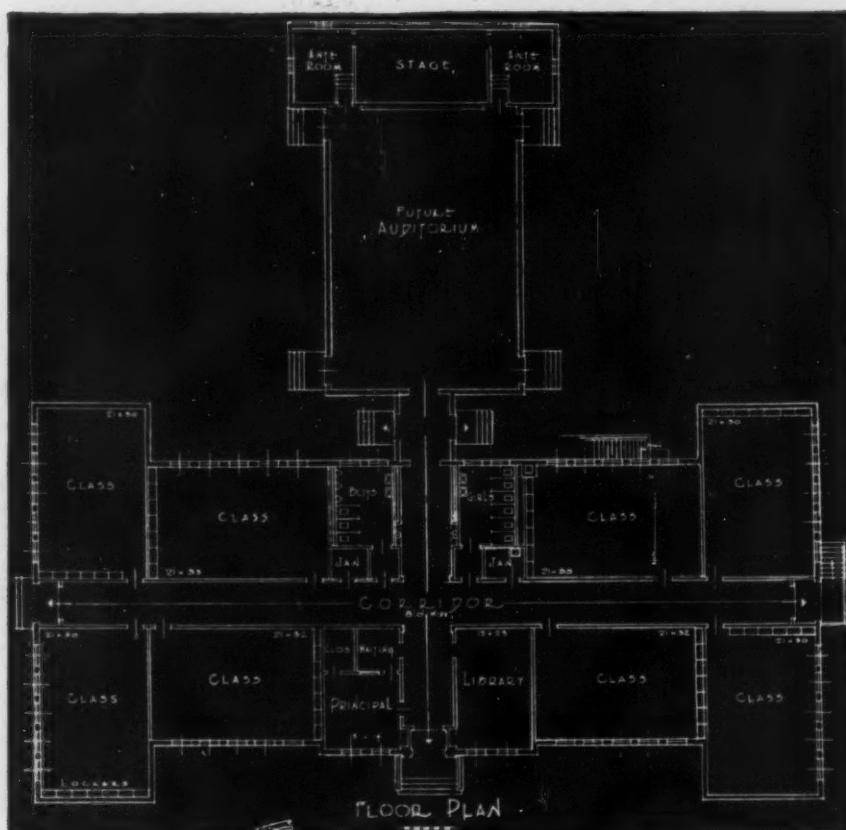
HEATING: Two pipe steam, exposed radiators, cast-iron jacketed boiler and hot water generator.

PLUMBING: Vitreous china fixtures throughout. Drinking fountains recessed into corridor walls. Septic tank and filter bed. Deep well with pump and pressure tank in separate building.

LOCKERS (in each classroom): Wood construction by mill contractor, each with shelf and hooks.

Since the building was expected to receive fairly rough treatment, wood wainscoting, 7 feet high, was incorporated in the corridors where the worst abuse was expected and to window stool height in the classrooms. All wood trim is finished with the wax-varnish penetrating stain in a medium brown color. It has proved to be satisfactory both in lasting qualities and in ability to stand abuse.

The total cost of the building, excluding the 6 per cent fee, was \$30,400. Thomas R. Foust is the superintendent.





Growth of a Housing Project School at Linda Vista, Calif.

EDWARD ORTIZ Jr.
Teacher, San Diego, Calif.



1. Linda Vista as surveyors saw it.

HERE is the story of a school in one of the largest war-time housing projects in the United States,

bedroom houses. Each class had its own private house, complete with stove, sink and refrigerator. By the end of the current school term, the Kearny school will boast one of the finest plants in the country. It is now

part of the San Diego school system.

Linda Vista today has a population of more than 20,000 and approximately 3000 elementary pupils and 1500 secondary school pupils attend the junior-senior high school.



2. The mesa where Stephen Watts Kearny led his army when he came to California. Construction of the war-time housing project has begun.

portrayed in pictures. By the end of 1941, when the Kearny Junior-Senior High School had its beginning, Linda Vista (Beautiful View), Calif., had a population of approximately 10,000, most of its inhabitants having come from California. The next largest numbers were from Texas, Oklahoma and the southern states. The average age of parents was 23.

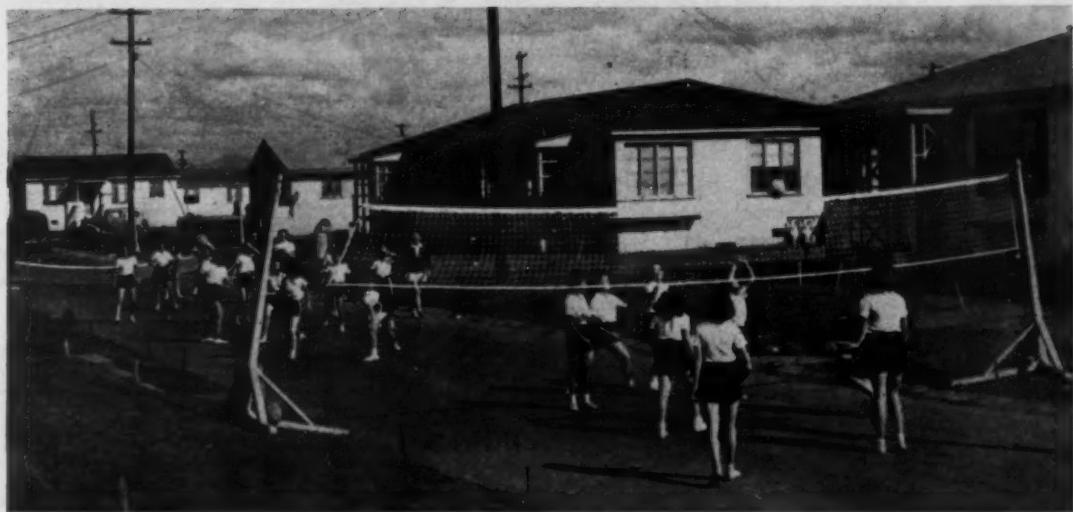
For a year and a half the school was housed in regular two and three



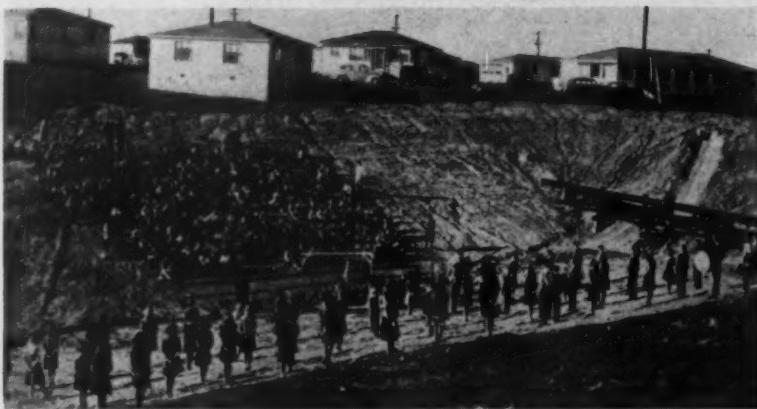
3. The battle of construction.



4. The first school occupied 37 housing units.



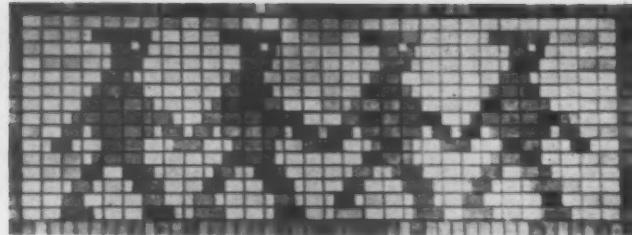
5. The gymnasium had no roof or walls. Fresh air and sunshine benefited health.



6. The "auditorium" was located just "south of the water pipe." The music department is here staging an assembly.



7. A section of the Kearny Junior-Senior High School as it looks today.



BRICK



An ANCIENT MATERIAL *for* Modern Schools



Interior of the auditorium at Wyandotte High School, Kansas City, Kan.

An example of the beauty which can be imparted to an interior by the use of brick. Here the walls, murals and frieze are done in this material. De-

tails of the frieze are shown above, the top one representing members of the school board. J. L. Hamilton, Chicago, is the architect and designer.

LAWRENCE B. PERKINS

Perkins, Wheeler and Will, Architects
Chicago

The things that need saying about brick are neither revolutionary nor new, merely radical (radical in the dictionary sense of the word: "to go to the root of"). We need to appraise the material for what it really is, then use it in the manner that the appraisal indicates.

The building industry, especially those representatives of the industry now concerned with prefabrication, is seeking a method of construction based upon the use of an inexpensive material, abundantly available, structurally strong and susceptible to flexible planning; a material that is pleasing in appearance and that provides its own exterior and interior finish. Brick is such a material and in one form or another answers these conditions.

Brick is abundantly available. Its ingredients are derived from clay and fuel of which we now have nearly a limitless supply; we can assume that we shall continue to have, indefinitely.

The strength and permanence of exterior walls of brick are not questioned. This very permanence can become a liability when buildings with a useful life of three or four decades are structurally able to withstand centuries. Cost is a third factor in favor of this building material. From the standpoints of firmaments



and maintenance, brick is the cheapest building material available.

The idea of being able to build in one initial structural operation a wall with a finished interior and exterior surface is worthy of further study and trial. In school work we are



Above: Detail of the secondary entrance to the auditorium section of Wyandotte High School.

Below: Brick-walled corridor of the Rugen School at Glenview, Ill., for which Perkins, Wheeler and Will, Chicago, were the architects.



Interior walls of brick require no other finish. They present an interesting surface as seen in this classroom in the Rugen School.

familiar with interior brick walls for gymnasiums, auditoriums and corridors, these being finished as part of the structural wall. The auditorium of Wyandotte High School in Kansas City, Kan., designed by John Leonard Hamilton, is a fine example of the use of brick as the interior wall finish.

Our firm has used the same principle in designing classrooms for Rugen School at Glenview, Ill. Here the exterior wall and the interior finish are of the same material and such surfaces are proving pleasant and appropriate.

Partitions and fire walls in the Rugen School are similar to the exterior walls. This makes the exterior and interior of the building part of a design whole and, by no means unimportant, makes them both part of

the earth on which they rest and from which they derive.

Variation of form in structures built of brick are nearly infinite. Jefferson's serpentine wall, the basilica of Constantine in Rome and any ordinary "two flat" building are examples enough to indicate the range. With a unit nominally 2 by 4 by 8 inches, the architect can make curves, slopes and planes, being limited only by his imagination and the law of gravity. In the future, as in the recent past, this material will not freeze the limits of planning or the freedom of forms. Brick is a material capable of expressing the outgrowth of the curricular activities housed within.

In this connection the brick and clay industry has shown a disposition to cooperate with "modular" sizing

of building units, as its part in the building industry's plan to harmonize the sizing of all parts of a building in order to eliminate much cutting and waste.

A brick wall is admittedly not the best barrier to heat transmission. This fact has deterred its use unless furring, lath, plaster, insulation or similar elements are added. Two factors modify this objection. One is the possibility of laying brick with air spaces between the interior and exterior surfaces. This is called a "cavity" wall. The second modifying factor is the utilization of radiant heat. This makes air temperature and infiltration less important factors in comfort.

Bricks are noncombustible, a factor promoting safety and durability. However, the elements can also destroy brick. If fire does not, water and temperature can.

Correct use of this material demands a design that will keep water out of the upper and lower extremes of a brick wall. An overhanging cornice is a device that will keep water out of brickwork. Carrying foundations above grade is axiomatic. Elimination of the parapet wall is mandatory. Workmanship is an enormously important factor; unless the mortar is expertly applied, moisture will be admitted.

All Clay Products Being Improved

All of the foregoing discussion applies to the whole field of clay products, not to brick in the narrower sense. Hollow tile, glazed tile, ceramic tile, glazed brick and other forms belong in this field. Improvements are being made on all of them. To select an example, a variation on a "telephone" tile is being developed to form a finished floor surface and at the same time to provide ducts through which air can be forced to warm the floor to heat the building.

The clay products division of the building material field has its job to do and it is not in competition with glass for wall areas, or with concrete, steel, plastics and wood for the jobs they can do best. If each material is used to its optimum in postwar construction, we can look forward to an evolution toward sensible and beautiful school buildings.

One progressive step we can take is to understand and assimilate the assets we have in clay products.

What of Postwar Building Reserve Funds?

WITH the war in Europe finally completed and the possibility of some relaxation of restrictions on construction activities appearing in the not too distant future, schoolmen are again beginning to think of their building programs and even of their blueprints for specific schoolhouse construction, alteration and repair.

Much is heard these days of the postwar reserves of various states and of large surpluses in state treasuries available, at least in part, for long-deferred and necessary public works. Sometimes in our enthusiasm over the possibilities which such surpluses and reserves offer for essential improvements, we are likely to forget that generally such surpluses or reserves are available only for expenditure on a state level, and not for school district purposes.

Generally speaking, where schools would be covered under such post-war reserves or surpluses, they are likely to be only state schools and not those directly operated by local or county school boards.

Local Building Reserves. What, then, is the status of local school building reserves? Recent court decisions are in conflict as to a school board's authority to create reserves for future building projects apart from specific statutes authorizing such practices. This difference of judicial interpretation is clearly indicated in two recent cases from Illinois and Oklahoma.

In Illinois, a county collector sued the trustee of a railroad to collect taxes. The question at issue was the legality of a 1941 school levy. At the time the levy was made, the school district had available almost twice the estimated expenditures for the year and a little more than double the average yearly expenditures of the two preceding years. The school

HARRY N. ROSENFIELD

Assistant to the Administrator
Federal Security Agency

board had a building program and was attempting to create a reserve to permit it to proceed with construction as soon as the availability of materials permitted. According to the court, the evidence showed that the plans had not reached the blueprint stage and that the district was not ready to construct within the tax year.

The court held the levy invalid. The basic issue was put thus by the court: "May the levy be sustained as an attempt to accumulate funds to pay for projects to be constructed in the future?"

Answering this question in the negative, the court ruled that the school district "is not authorized to make levies to accumulate a fund for some project to be developed at some indefinite future time. . . . Levies for such indefinite purposes are condemned for the reason that the unnecessary accumulation of money in the public treasury is unjust to the people, in that it deprives them of the use of their money for a period of time, and in that the accumulation of money in excess of needs furnishes a temptation to those in charge to expend public funds recklessly and more than is needed. . . . The contention that the board of education was acting within its discretionary powers in planning for certain projects for the future cannot be sustained."¹

An earlier Illinois decision had expressed the same conclusion: "It is well settled that school boards and other taxing authorities have no

¹People ex rel. Leaf v. Roth, 59 N.E.(2) 271 (Ill., 1943), discussed at length in *The Nation's Schools*, vol. 34, p. 45 (Sept. 1944).

power to make a levy to accumulate a fund for use at some undetermined future time."²

Reserves Permitted. Oklahoma, on the other hand, does permit school districts to accumulate building reserves without specific statutory authorization to that effect. There suit was brought against the county excise board to protest the building fund levies of three of the county's school districts. The state constitution provided for approval by a vote of the people of the school district for an excess levy of not more than 5 mills per taxable dollar for the purpose of constructing public buildings.

The plaintiff, who protested these particular levies, argued that funds collected under the authority of this constitutional provision must be expended in the fiscal year in which they were collected and, consequently, could not be accumulated in a reserve for future use. And, the argument continued, since material priority restrictions prevented any construction within the tax year, the levy of the tax was void.

The court upheld the tax. Although a surplus so collected could not be used in succeeding years for purposes other than for which it was collected, as for example, for general fund expenditures, the court ruled that funds could be accumulated for the purpose for which they were collected. The constitution authorized school districts "to allow the proceeds of successive levies authorized by a vote of the people to accumulate and be expended together. . . . If school districts were denied the right to allow the various building fund levies to accumulate and be

²Board of Education, Rockford, v. Board of Education, 321 Ill. App. 131, 52 N.E.(2) 643 (Ill., 1943).

spent together, many small districts would be deprived of this means of financing a new building, for few districts have an assessed valuation sufficiently large to erect a building with the proceeds of a single 5 mill levy."¹³

¹³Lone Star Gas Co. v. Bryan County Excise Board, Okla., 141 Pac. (2) 83, (1943).

Statutory Basis. Of course, the accumulation of a building reserve or of any surplus legally expendable for school building construction is not the only fiscal procedure available to school boards to finance construction. The bond issue is a basic method.

However, in periods when current tax rates may yield excess revenues

either because of increased valuation or through the accretion of new taxable resources, the reserve fund may prove helpful as a means of reducing future taxation in a period which may find the school district's taxable resources less able to bear the expenditure for sorely needed up-to-date school facilities.

War-Time Tenure of Superintendents

ANTON THOMPSON

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ALTHOUGH attention has been given to turnover among teachers, there has been little discussion of the effect of the war on the tenure of superintendents. Here are some data on the latter subject in one state during and preceding World War II.

Information covering the period 1934-44 has been drawn from the official educational directories published annually by the department of education of the state of Minnesota. Complete data were available for 486 school systems and all were included in the survey.

The 486 schools are classified as "small," "medium-sized" and "large" according to the number of full-time teachers employed in each in 1934 to show the relationship between length of tenure and the size of school systems. Most Minnesota superintendents are serving small schools, which in 1934 employed 10 teachers or less.

During the last ten years the tenure of superintendents in small schools has been shorter than that of administrators in the larger schools. During this period most small schools have been administered by three or more persons. As extreme cases of short tenure, each of seven small schools was administered by six superintendents and two districts employed seven administrators. On the other hand, approximately two out of five of the medium-sized and large school systems retained the same chief executive for ten years.

Several significant facts about the effect of the war on administrative turnover are shown in table 2. Thirty per cent of the superintendents serving the 486 schools in 1943-44 were

Table 1—Number of Different Administrators Employed by 486 Minnesota Schools, 1934-44

Supts. per School 1934-44	Size of Schools by Number of Teachers		
	Small (Under 10)	Medium (11-30)	Large (Over 30)
1	36	62	25
2	77	65	22
3	97	29	9
4	36	4	2
5	13
6	7
7	2

new in their positions, more than twice the normal (or prewar) turnover rate for the state as a whole. At the same time it was a higher rate of turnover than was reported for teachers in the first two years of the war.

A second fact is that the war has had little effect on the tenure of the superintendents who serve districts employing 11 teachers or more. It has had a tremendous effect on the tenure of the men who have headed the 268 small school systems. In 1943-44, more than 40 per cent of the administrators of small schools were new in their positions. The highest

rate of turnover in any prewar year surveyed was in 1937-38 when 20 per cent of the superintendents of small schools were newly elected.

There are probably several reasons why the war-time turnover among small school superintendents has exceeded that of men in the larger schools. Generally, the younger superintendents begin their services as administrators in smaller schools. Selective service would be more likely to draw on these men than on those in the larger systems. The younger men, too, have found it easier to obtain military commissions.

A second major factor is the low income which the men in these schools earned before the war. Most superintendents of small schools were earning salaries of less than \$200 a month before Pearl Harbor. The war gave many of them an opportunity to go into federal service or into war industries at incomes that outstripped their peace-time earnings.

If a high rate of turnover is to be looked upon as one of the critical problems of education today, it is not one which is limited to teachers.

Table 2—Changes in Minnesota Superintendents, 1935-44

Year	Number and Percentage of Changes in							
	268 Small Schools		180 Medium-Sized Schools		58 Large Schools		All Schools (486)	
	No.	%	No.	%	No.	%	No.	%
1935-36.....	49	18	11	7	5	9	65	13
1936-37.....	53	20	25	18	7	12	85	18
1937-38.....	54	20	15	9	7	12	78	16
1938-39.....	34	13	10	6	3	5	47	10
1939-40.....	32	12	11	7	5	9	48	10
1940-41.....	36	13	10	6	3	5	49	10
1941-42.....	44	16	12	8	5	9	61	13
1942-43.....	65	24	14	9	3	5	82	17
1943-44.....	109	41	27	17	8	14	144	30

Teaching Religion in Public School *is playing with fire*

EDWARD O. SISSON

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TO THE great mass of the American people the strict exclusion of religious instruction from the public schools is an established fact. The pleas and demands for its reintroduction, once frequent and insistent, have become few and rather more pathetic than urgent. Yet they still appear semi-occasionally.

All such pleas are playing with fire. The best cure for any desire to go back in this matter is to look back and then look about. Let us do both.

The schools in Colonial America certainly had religious instruction and had it in unmistakable form and abundant quantity. Taking Massachusetts, the cradle of our school system, as an example, we find the early schools in that state completely imbued with the orthodox Puritan dogmatic theology, with the minister of the established church supervising and catechizing. Two of the principal books used were the "New England Primer," Calvinistic through and through, and the "Shorter Catechism." These served, as one writer puts it, as "milk for New England babes."¹

Orthodox Teaching Dominated

The colony itself at the start was almost exclusively orthodox and the orthodox dominated all public and most private affairs. There is more sad truth than jest in the jibe that these colonists came to America to worship God according to their own conscience and to compel everybody else to do the same. These were the colonists who drove Roger Williams out for preaching and practicing religious toleration and denying the right of government to meddle with any man's religion, and who also

persecuted Quakers and Anabaptists.

But the rigid religious quality of the school could be maintained only so long as one religious body was dominant in the community and no longer. As soon as the colony began to have numerous nonorthodox members, Baptists, Methodists, Episcopalians, Universalists, even Catholics, the rigid orthodoxy of the school became intolerable and began to suffer gradual but progressive liquidation.

First Law Against Sectarianism

The process began before the Revolution and was well advanced at the beginning of the nineteenth century. True, the law did not catch up with the fact until 1827, when a statute was enacted forbidding any school committee "to use school books that are calculated to favor the tenets of any particular sect of Christians." This statute may be called the first definite statutory pillar of our present policy and practice.

It is a long road from the rigid orthodoxy of the Colonial school to the present public school without any specific religious instruction. The main causes of the momentous change are two, both quite natural, lying outside of the school itself and coercive in their action.

The first cause is the constitutional rejection of the traditional doctrine that the government could prescribe the people's religion. It is not an accident that the first clause in the Bill of Rights forbids Congress "to make any law respecting an establishment of religion, or prohibiting the free exercise thereof." The spirit of this principle is far wider than the mere terms of the statute and pervades our whole political and social life. The existing practice of strict nonsectarianism in the public schools is the inexorable logical consequence of this principle.

Hence, I have called movements to reintroduce religious instruction into the public school "playing with fire" for, if the state can introduce religious instruction into the schools, it is on the road both to "establish religion" and to limit the liberty of the citizen. This is the ground for the predominating public support of the present plan. Any persistent and energetic drive to reintroduce religion into the schools, under any guise, is certain to kindle strife and animosity in numerous quarters on various grounds, as we may see more fully presently, to the damage and peril of the whole school system.

The second cause of the elimination of religion from the public schools is the enormous multiplication and variegation of religious bodies in the country. It is clear that this second cause depends upon the first, for only constitutional freedom of religion has made possible the birth and flourishing of the almost innumerable sects that now exist.

Sects Numerous Today

I have before me two pages of fine print which I commend to the earnest attention of anyone seeking to understand this problem, especially anyone who seeks to put religious instruction back into the schools. The pages are found in the 1944 "World Almanac" and are entitled "Census of Religious Bodies in the United States." Here are listed 256 separate and distinct "bodies." We must remember that this list is by no means complete but contains only such organizations as were reported.

In size, the bodies range from the giant of the whole list, the Roman Catholic Church, with nearly 20,000,000 reported adherents, this being well over one third of the grand total of all the bodies, which is nearly 56-

¹Hinsdale, B. A.: Horace Mann, chapter IX, "Controversy With Religious Sectaries," Charles Scribner's Sons, 1900. The entire chapter will bear reading in studying our present problem.

000,000, down to "Friends, primitive," with 14 members. In faith and practice the list ranges from the usual orthodox Christian sects to Mormons, Swedenborgians, Christian Scientists, Spiritualists, Buddhists and a host of others with names so odd that one can form no idea of what they may stand for, the oddest being Schwenkfeldians, who claim no less than 1986 adherents.

Eight major groups embrace over 85 per cent of the total membership. These are, in order of size, Roman Catholic, Baptist, Methodist, Jewish, Lutheran, Presbyterian, Protestant Episcopal, Disciples of Christ.² Next come several smaller but still important bodies, such as Mormons or, to use the official title, "Church of Jesus Christ of Latter-Day Saints," with about 700,000 members; Eastern Orthodox (mostly Greek), 350,000; Church of Christ Scientist, 270,000; Dunkers, 150,000.

Most of these large groups are aggregates of smaller subgroups, Baptist and Methodist, for example, each having about 20 subdivisions, exhibiting, to quote an old phrase, "the dissidence of dissent." In sharp contrast with these composites stands the Roman Catholic Church with its solid, unbroken block. Only a patient examination of the two pages in the "World Almanac" can give a real sense of the proliferation and differentiation of religions in the United States.

Reckoning With the Unchurched

The largest group of all, religiously considered, is entirely omitted from the catalog, the great unchurched, but not necessarily irreligious, majority. It, too, must be reckoned with in any problem of religious instruction in the public schools.

What is the over-all message of these pages? It is that religion in hard statistical fact is the most contentious and divisive element in our national life. Paradoxically enough, in this very division lies safety. So long as the orthodox Puritan church predominated over all others in the Colonial society, there was no religious freedom; when the people were scattered into several denominations, liberty was advanced. Also, so long as one sect dominated the community, religious instruction was

²Error in order is possible here because of uncertainty as to affiliation of smaller groups making up the larger groups.

feasible, and only so long. Now, at the very mention of religious instruction all these hundreds of sects will be on the alert to see to it that their own tenets are taught, or at least, that nothing is taught of which they do not approve.

One single fact in the picture of religion in this country should be enough to rebut all proposals for putting religious instruction back into the public schools. That fact is the Roman Catholic Church in the United States.

Catholic devotion to religious education is complete, even to the extent of establishing its own system of schools at its own expense, for the proper religious instruction of its children.

If all Catholic children attended parochial schools and no Catholic children attended public schools, the Catholic Church might well be indifferent to religious instruction in the public schools. But hundreds of thousands of Catholic children do attend public schools.

Does anybody imagine that the Catholic Church is going to abandon its age-old principle and tolerate any religious instruction of Catholic children by any but Catholic teachers and in any but Catholic doctrine? It will never consent to this and un-

der the Constitution the Church can never be coerced. One of the first consequences of teaching religion in the public schools would be to drive out or isolate the great Catholic contingent in those schools.

To all this, many advocates of religious instruction protest that they want nonsectarian instruction, including only such religious elements as all normal and decent persons will agree to. We must answer them flatly that there is no such body of religious teaching. When the sectarian is subtracted from the religious, the ethical remains and the doors of the school are open to the ethical now. To put anything into the public schools bearing the label of religion would be to ensure strife and damage and to court disaster to the most precious of our democratic possessions, the American public school, "for all the children of all the people."

I must add that on the basis of the fundamental principles of ethics and education, and of more than sixty years of close contact with the schools, I hold the American public school, with all its shortcomings, to be the supreme embodiment of true democracy thus far in history. It is profoundly religious in the deepest sense of the word.

General Versus Unit Shop

KENNETH W. BROWN
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FOR good and defensible reasons, the history of the school shop program has been largely that of the unit shop. If we examine the record as it exists in courses of study, statements of objectives, textbooks and principles of teaching shop work, we find our shop programs throughout the junior and senior high schools have been devoted extensively to skill attainment and other vocational ends. The shop which serves these objectives best is, of course, the unit shop.

Although the general shop originally was hardly more than a series of unit shops fitted into one room with content taken verbatim from unit shop courses, the general shop today stems from concepts of education and shop work that differ

in certain respects from those underlying the unit shop. It has come to be associated principally with the industrial arts program which is conceived to be devoted to the development of understandings concerning the production, distribution and use of the world's goods and services.

The job of industrial arts, then, is to interpret to the individual this man-made or industrial environment. Skills or technics in the proficiency of workmanship, therefore, assume a less prominent part in this program than in one dedicated to vocational ends. Consequently, the general shop is looked upon by many as the type of physical set-up which is most economical and best suited to meeting the needs of the adolescent in the junior high school.

5-Point Salary Schedule

SOME equitable way of compensating teachers is an absolute necessity to the effective operation of a school system. Most salary schedule makers, in their effort to keep schedules simple and easy to administer, do not take into account enough factors to make schedules sufficiently inclusive. Five points are here mentioned as worthy of study.

1. Payment of Salaries in Accord With General and Professional Preparation. Most people will agree on this point. College graduates should be paid more than those who are not graduates. Those who spend time and money for advanced and improved preparation should be paid additional amounts upon the attainment of the bachelor, master and doctoral degrees.

2. Length of Service. There is general agreement that a teacher who has served a district for ten, fifteen or more years is entitled to an increment on the basis of time served, provided, however, that there are definite evidences of growth in efficiency. The amount and frequency of increments based on service can be determined by each district.

3. Efficiency. Here is where general agreement ceases. Most administrators want nothing to do with this matter of deciding who gets an increment based on efficiency. The administrator's position involves enough hazards without adding this one. Somehow or other this point is important and should be taken into account. Efficiency is said to count in other walks of life and should in school teaching. On almost every staff of any size some members are known by their colleagues and outsiders to be less efficient than others. A schedule which awards the same amount of pay for inefficiency, average performance and superior performance is open to criticism.

There might be much less trouble if increments for efficiency were to

be granted to all teachers who are reasonably satisfactory instead of to only a few super teachers. A fairly large committee, consisting of the superintendent, principal, supervisors and several of the outstanding members of the teaching staff, should make the final determination in this matter. A decision reached by such committee would be less open to criticism than one made by one or two administrative officials. The important points to remember are to make the increments for efficiency attainable by the average faithful teacher and to have the work of selection done by a committee on which the teachers as well as the administrators are represented.

4. Extra Pay for Extra Work. The principle of extra pay for extra work is well recognized except in school work. Judging from the number of questionnaires received recently, a great deal of thinking is being done on this subject. Up until now athletic coaches, dramatic coaches and musical directors are the only teachers who receive extra pay.

Teaching is not a piecework job but it seems only fair to pay extra for definitely assigned activities which take place after school hours. Many a faithful and capable teacher spends hours after school and in the evening coaching desirable activities while at the same time other teachers leave promptly when the bell rings to enjoy recreation or to engage in some part-time employment and thus supplement their pay check.

Administrators hesitate to recommend extra pay for extra work because it is hard to determine where to draw the line. Some suggest higher pay for all teachers and responsibility for extra work shared by

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all teachers as a solution to the problem. This might work if all teachers were well qualified and willing to undertake extracurricular work.

Unfortunately, on every staff there are those who seem to have no particular ability as sponsors of activities and have little interest in such work. To excuse capable sponsors from a certain amount of class work to equalize the load is to rob the pupils frequently of the most capable teachers. Excusing teachers from class teaching would soon result in the necessity of adding another teacher to the staff, which probably would cost more than would have to be paid for extra work to a few capable sponsors of extra activities.

There should be extra pay for extra work done out of school hours. A committee similar to the one mentioned previously should supervise this matter. A member of the school board might be added to it.

5. Allowance for Dependents. Not much has been done along this line. It is generally opposed by single women teachers who maintain that they do as good work as married men and should have the same pay. "Equal pay for equal work" is their slogan. In this matter no line should be drawn between the two sexes. Women who have dependents should share in exactly the same manner as married men. It goes without saying that married men would be the greatest beneficiaries of dependency allowances. If we want to keep and attract men of ability into our profession, we must make it possible for their families to maintain a standard of living befitting our profession.

Most people will agree that the ratio of male to female teachers

should be 1 to 1, without a thought of criticism of the excellent work done by women teachers. Yet how can we expect to retain capable men with families in a profession in which the salary is fixed to meet the needs of single individuals? The family is the most important unit in society and any school salary schedule which does not make it possible for a schoolman to have and maintain a family at a decent standard of living is overlooking an important consideration.

It is more important to have a certain number of family men on a school staff than in some other walks of life where the training of the young is not involved. Men with families are inclined to be stable and expect to remain in teaching as a life work. They are not generally inclined to move about and, therefore, have a steady effect upon a staff.

Some might argue that income tax provisions equalize salaries of those with and without dependents. While it is true that single persons pay more than those with dependents, there is still not enough equalization.

Again, the matter of administration of such a provision comes up. This does not present great difficulty. A board would put in the budget for teachers' salaries a certain amount to be paid to staff members, male or female, who have dependents.

A committee composed of about the same membership as previously suggested would handle the matter. Forms provided by the district would be furnished to all members who wish to apply for the allowance. The application would be notarized like other important papers and submitted early in the year so that the committee could study the claims and make the allotments.

Five important considerations for salary schedule makers have been briefly discussed. School districts can build equitable salary schedules for themselves based upon these considerations. The amount of money to be spent on each of the five points is up to the board. The districts can experiment with each point and change the schedule at any time based upon experience and finances.

physical education department can work up a square dance group to give public performances.

For Pan American programs, Spanish classes can present songs and brief plays in the Spanish tongue.

The dramatics club or the public speaking class in the high school could have a few pupils, who particularly like to do that sort of thing, prepared so that on short notice they could give readings and monologues. Even one-act plays that require little or no scenic effects could be worked up for presentation before clubs and similar groups.

Pupils from English classes could be trained to give biographical sketches of characters that are of particular interest to women's study clubs. Boys and girls in biology classes might give talks on Victory gardens, flower culture and the control of insect pests.

Mathematics pupils could work up a number of clever and entertaining mathematical "stunts" while pupils from science classes could prepare short programs of general interest to be given either with or without special equipment. Talks on astronomy are of interest to almost everyone. If the pupils have built a Tesla coil, they might give demonstrations of feats with the high frequency currents.

Home Economics Programs Entertain

Girls from the home economics department could entertain and at the same time instruct women's club members with short talks on cooking, dress styles and housekeeping. They might even present style shows of dresses they had made.

The experience which pupils gain in appearing before adult audiences is invaluable while the incentive of having a public appearance to prepare for is always a stimulus to interest in any group.

To obtain bookings, a representative from the school could contact the program chairmen of various organizations in and about the community and let it be known that the pupils would be happy to present short programs. Many friends can be won in this way and the school can become an integral part of the community by showing its patrons something of the diversity of work being offered in a modern school system.

Let's Book School Talent

LAWRENCE A. BARRETT

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ALMOST any community nowadays, be it large or small, has a number of clubs, lodges and organizations that are presenting programs either as a feature of their meetings or for relaxation following their "business sessions." Local schools are missing a great public relations opportunity if they do not serve occasionally as clearinghouses for talent for some of these programs.

The music teacher will find it a definite stimulus to pupil interest if the boys and girls know they are soon to appear at a chamber of commerce dinner, an American Legion rally or a Methodist box social.

If the school has a band or orchestra, it can have soloists and possibly a duet, a trio and a quartet ready on short notice to play on special occasions. Then when the Odd Fellows or the Masons or the

Kiwanis club is having a special program the officers would need only to contact the school and obtain the performers. To enliven community gatherings, a small "German band" or possibly a "jazz band" could be worked up with players from the school band and without much work on the part of the director.

Obviously, the music department, more easily perhaps than any other, can assist in supplying talent for community programs, but other departments can also furnish programs, or at least brief features for various purposes.

The social science and history classes can have "on tap" teams to debate informally some of the issues of the day, presenting the cream of the arguments on both sides and possibly allowing questions to be asked from the floor. Pupils from the



Facing classes of cynical adolescents requires courage and patience on the part of the teacher.

Salvaging the Juvenile Delinquent

A. M. PITKANEN

Compton, Calif.

Photos from "Children of the City,"
British Ministry of Information Film

UNLESS strong, intelligent measures are taken by parents and teachers, an important war on our home front will be lost. It is the war against juvenile delinquency and, so far, it has gone badly.

Most people have not bothered much about delinquency beyond considering youthful misbehavior "a damned nuisance." Many citizens merely shrug their shoulders at its implications; they say, let it take its course and in time it will run itself out.

But can juvenile delinquency run itself out into harmlessness and into a half-remembered bad dream? Instead of becoming less dangerous with time, this delinquency becomes tremendously more harmful to our general welfare.

Even though delinquent parents are largely to blame for wayward children, teachers in our schools must cope with pupils' wiles for they come directly in contact with the worst of the offenders. Facing classes of defiant and cynical adolescents requires real courage and patient understanding on the part of teachers these war days. Disciplinary problems tend to discolor every school day in many localities; in some cases, they are not solved but are even aggravated by

the failure to understand their causes.

Vexed teachers search bewilderedly for possible solutions and in their desperate attempts often hit on the wrong tactical procedures; in consequence, teacher-pupil conflicts grow more critical. Harried, confused youngsters, the victims of disrupted home life, under the evil influence of misguided associates and possessing an unhealthy outlook, are antagonized by the teacher's unrealistic treatment of their problems, by the unsympathetic attitudes shown them at home, in public and at school.

Disciplinary cases cannot be cured of their unruliness by browbeating or by manhandling. Every delinquent is a sick child and must be handled as such. When a family is so disrupted, as many are these days, that the child is deprived of close parental supervision, he loses a sense of belonging, a sense of personal worth or responsibility, and seeks to compensate for this lack by behavior that, because of its unorthodox nature, attracts attention and concern.

Many times, being forced to get his own meals and being physically thrown on his own, the child becomes actually ill, bodily and mentally, through his ignorance and carelessness. Irritated by the routine

orderliness of school procedure, he often rebels and comes to be labeled a juvenile delinquent.

Certain realities must be understood by both teacher and pupil before constructive work can be accomplished in the handling of delinquent children. The causes for delinquency are many. The principal two are the war and the parents. Both of these are largely out of the control of the teacher but other causes can be modified enough to remove their disturbing influences.

The need for attention to their home responsibilities can be made clear to parents through the influence of the P.T.A., the newspapers and, when occasion arises, by the juvenile court authorities. It is imperative in this drive against juvenile delinquency that the home environment be definitely bettered before the child in a disrupted family circle can be expected to grow healthily and normally into decent adulthood. Bad companions, gang life, unsupervised leisure activities, the tendency to roam about wildly must be discouraged as much as possible. Organized youth clubs appear to be worthy substitutes for the gang life of the streets.

The lack of parental love at home does much to warp a youngster's out-

look on life and makes him feel inferior, and when teachers drive home their barbs of ridicule and open antagonism that sense of incompetence and unworthiness becomes more unbearable. The boys and girls who are more individualistic and daring than others openly rebel, show off their acclaimed wretchedness and become truly outlaws; the meek go down into the dark chasms of despair and, desiring compensation, often surprise their elders with their dismal deeds.

How many teachers, pondering over the unnatural behavior of their problem children, think about the important part which malnutrition, poor eyesight, bad teeth, physical handicaps, thwarted self-expression play in causing personality disorders?

Important Considerations

How much attention has been paid by school administrators to character building? How much of our instruction is sufficiently stimulating and interesting to the pupil who, during the summer vacation, earned as much per month as Miss Teacher receives this month? How important has that child been made to feel in the classroom among his fellows? Does he have a sense of belonging that has not been soured by frustration?

If Johnny continually fails in his studies, has any thorough investigation been made to ascertain whether he actually knows how to study his lesson? Has the "guy who knows all the answers" been sold on the worthwhileness of putting time and effort on the school program?

If a negative answer is given to these questions, you then have some of the causes for delinquent behavior. If little attention has been paid to the home life and out-of-school activities of boys and girls, there is additional reason for their undisciplined actions.

What, then, in brief, are the correctives? Discipline in school can be maintained only if the teacher adheres closely to the following suggestions.

Every class period must be strictly businesslike in the sense that production of effort is to be visible in everyone. Each pupil must follow a definite study routine. A scientific presentation of proper study habits, methods of memorization and learning should help clarify to all the techniques which make for success at school. The subjects studied should be



Many a delinquent youngster reaches out a frightened hand for help which it may fall to the teacher's lot to give.

made interesting enough to appeal to the adolescent, to be related to his needs and his experiences, present and future. The skills learned, the knowledge gained should be clarified as fitting into his life objective. Every pupil should be encouraged to formulate a definite ambition, a life goal, and be made to see that what he learns in the classroom can help him reach that goal and live a worthier life. In the creation of subject-interest, the teacher himself is required to have a spontaneous interest in his subject and in his pupil. Every teacher needs to keep ever in mind that he is a builder of a life!

Gaining of Wisdom the Objective

Too much attention has been given to factual memorization, the cramming of bits of information, useful or otherwise, into those receptive minds which are open to the storing of data; too little emphasis has been placed on the technics of thinking. Gaining wisdom, not just the acquisition of "book larnin'," should be the aim of the pupil.

The personal touch of a sincere teacher, who has confidence in the ability of even the slowest of his pupils to achieve a place in life, can do more to encourage a confused youngster than any amount of verbal beatings. No normal person likes ridicule. People do not like to be driven without reason; they do welcome understanding, sympathy, true friendship.

If the subject taught is an abstract

one, a bit on the "unnecessary" side in our technical-minded, machine-driven, money-mad world, a teacher must exercise the best of the persuasive arts to make the usefulness of his course clear to his listeners. He must adjust and streamline his teaching methods so as to stimulate and capture the interest of modern youth.

Wherein Teachers Fail

It is at precisely this point that some teachers fail. They fail too often because they themselves have not been fully converted to the worthwhileness of their endeavor. Or, they have fallen into the trap of narrow devotion to their pet phase of learning and fail to see good in anything else. This monomania on the part of the teacher breeds contempt in the worldly-minded pupil and brings on distrust of the teacher's intelligence.

Above all else, a teacher's sense of spiritual values is quickly radiated to his brood. His sincerity in action will convey more than his words. His attitude of friendliness will, in turn, gain him friends in the classroom. There is no one more anxious for a friend, a confidant, a helper, than a youngster who in his bewilderment senses that he has let himself go and has become delinquent. It is up to the teacher, then, to grasp the outstretched, frightened hand thrust out invisibly toward him; it may be his fortunate lot to supply the needed help in a child's last, desperate, honest attempt at salvation!

New Emphasis on Morale

A formulation of objectives is the spearhead of any plan directed toward building up morale in schools

A NEW and stronger emphasis on morale, the driving force underlying all successful cooperative achievement, is bound to follow the war. All forms of human endeavor will feel the effect of this emphasis—business, industry, government and schools. The war has demonstrated how policy can be developed cooperatively and responsibility shared in attaining an extremely high level of achievement. Allied operations in Europe and our military successes could not have been achieved without cooperation of the highest order extending from the lowest to the highest ranks. The private, the corporal and the ordinary seaman each knows how important his individual responsibility is.

How many times the newspapers have described the exploits of some soldier who carried on his own private campaign when out of touch with his commanding officer! One reason for this may be the native enterprise of the American soldier, but another is the high morale developed in our fighting men.

What is morale? What are the forces that generate it? How can we improve it? These are questions every schoolman will be asking himself frequently in the future because he understands that excellent morale makes for decidedly superior achievement.

Businessmen Know Its Value

Some business organizations, particularly large corporate enterprises, have been paying close attention to morale. Roethlisberger in his "Management and Morale" states the case succinctly. Also the classified columns of the metropolitan newspapers call for many "personnel relations" men at high salaries. And labor and management committees, which make for better labor relations and morale, are no longer the exception in large factories. Few schools have

yet tackled the problem of developing high morale among personnel though a few have begun to do so. In the coming years, the level of achievement in a school staff will depend more on morale than on salary schedule or any other single factor. The gulf between better and fair schools will increase as the former strive to implement good morale.

Do not assume, however, that morale can be achieved in schools by the same methods as in industry for there are inherent differences among institutions that call for a keen analysis of each organization.

Vital in School World

Schools deal with vitally important intangibles, such as character building, the creation of habits and attitudes, the instilling of basic and selected information. Ideals form so large a part of school objectives that teachers are engaged not only in a business or a profession but in a high calling. Moreover, there is a practical consideration that differentiates business enterprise from public education. Business and industry deal largely with material things, with manufacture, distribution, selling at a profit. The management controls expenditures. But public schools are operated within a budget determined by public authority and school management must function within its definite limits. Yet the schools, with the coming men and women of the nation as their product, are really the largest producing concerns in the nation.

However, most of the principles that make for good morale and successful administration apply to gov-

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ernment, to the Army, to business and industry, to educational institutions or to any group organized with good motives. Studies of morale and management show that a plan for creating and sustaining good attitudes and desired results must be simple and easily understood and must be based upon cooperation. The latter can be fostered by means of frank interviews with individuals and free discussions with groups vitally concerned with the success of the common undertaking.

Evidence obtained from management officials and from school heads indicates that each institution has its own problems and objectives, conditioned not only by its particular situation (as to the character of the undertaking and of economic, geographical and social factors) but also by reason of the differing personalities involved. Students or employes, teachers or foremen, parents or clients have personal needs, individual attitudes, inherent capacities, all of which must be considered.

Each Has Distinct Problem

Then, too, executives themselves, as well as those to whom they delegate authority, differ in their capacities, latent powers and consequent strength and limitations. All of this makes each management situation more or less different from every other because each ensemble of circumstances differs from every other and the spiritual comprehension of the top men constitutes the quality and power of the influence that moves the organization and the people who comprise it. This applies forcibly to school situations.

Keen schoolmen have long recognized the morale value of concise statement of the real objectives of a school and its activities. Such a statement will be of little value if it is the work of the administrator alone; it must be the outcome of a formula which may be expressed roughly as $D+L+D+T+S$. D stands for free and open discussion, L for tolerant sympathetic leadership, T for time, S for the statement of objectives.

Requires Cooperative Thinking

Variations in the current development of objectives will give more intelligent direction to the cooperative efforts of the school faculties. One of the latest valuable statements of objectives from a large and up-to-date high school faculty is stated under the title "Fourteen Points." This represents the thinking of teachers, some of the pupils, the principal, the vice principal, heads of departments, the director of guidance and the assistant to the principal. It was completed after four months of intensive discussions. Each member of the group had one vote, and there was no cloture.

Fourteen Points in Educational Philosophy of Administrative Group

1. Our high school exists for the purpose of providing, developing and appraising the learning and living situations and processes of its 3300 pupils. All teaching is directed toward that end. The function of administration is toward that end.

2. First of all, we must let our pupils see that we like them and respect their rights as individuals. Our attitude toward them must be sympathetic, helpful and patient. The teacher and the pupils should constitute "our class," not the pupils alone.

3. We should become better acquainted with our pupils for then we shall understand them better. We should know not only how they act in class but also something of their personal history, home life, social and medical history, reading ability and any other pertinent facts we can obtain. And we should never lose sight of the fact that each pupil's individuality is as sacred as our own.

4. We should try to inspire every pupil with a sense of personal responsibility for the successful con-

duct of all class activities and projects and with the desire to contribute to that success. We should encourage wholesome activity and break away from class regimentation when it occurs for the sake of teacher domination or artificial discipline. The only worth-while discipline is self-discipline.

5. Knowing the psychological implications of the learning process, we must adapt our instruction to the different levels of individuality as effectively as we can. It is a symptom of inadequacy and it is unfair to take advantage of our position to exert pressure on a pupil through the use of sarcasm and ridicule or a display of anger. The teacher should resort to his vested authority as sparingly as possible; he should endeavor instead to enlist the sympathetic cooperation of the pupil in attaining a worth-while objective.

6. Since we are directing the growth of all the boy or girl, not only his mental processes, we must not underestimate the importance of the emotions in the learning process.

Punishment Undesirable

7. We feel strongly that punishment is not a desirable part of the technic of instruction and is justified only as a means of redirecting the attitude of the uncooperative pupil to good ends. Even then, we should use it only after a thorough study of the situation and after all other means of bringing about a cooperative attitude have been tried without success.

8. We should realize that pupil failure is our failure and that washing our hands of a situation is an admission of incompetence.

9. The enemy of education is the closed mind. Therefore, we should encourage discussion and critical thinking in the classroom and direct it toward the development of the individual. To cut short honest interest on the part of the class is indefensible; rigid adherence to a class plan is not so important as stimulation of ideas. We believe that method and technic should be adapted to the personality of the class and the teacher. This is more important than uniformity for desirable aims may be achieved variously.

10. Learning processes develop best in living situations because education is not merely preparation, it is life. By its very nature, education

must be a dynamic thing, not static.

11. In measuring pupil progress in any field, standards are essential; but it must be remembered that a too rigid application of arbitrary standards would ignore individual elements that should be taken into consideration in measuring the achievement of human beings. We should consider standards, therefore, as giving help and guidance in such appraisal, not as constituting the only determining factor. We realize the value of praise and constructive criticism; there is no place for purely destructive criticism.

12. In providing and developing the learning and living situations and processes of our pupils, our aim should be to create in each individual the desire and the will to work and to produce to the fullest extent of his ability. We believe in a philosophy of work that leads to desirable ends and is supported by motivation of interest. Appraisal of results should be made freely and often by the teacher and pupils together, not by the teacher alone.

13. The administrative group of our school is not so much concerned with an operational chart as it is with the social understanding through which we attempt to achieve our objectives by cooperative action. Though we do not deny that the final responsibility for decision is the principal's, we hold the opinion that every member of the faculty has an important responsibility for the proper functioning of the whole. There can be no evading such responsibility.

We Must Formulate Objectives

14. And we conclude as we began. We believe that the administration of the school exists for one purpose: to facilitate the improvement of teaching and learning.

One of the best ways to begin striving for good morale in a school or an organization is to encourage the formulation of specific objectives. This provides an excellent opportunity for sharing responsibility through cooperative action. But, whether you write down your objectives or not, remember that any plan for improving morale must be simple and easily understood; it must be based upon cooperative effort and conditioned by an analysis of the particular circumstance or situation that is at hand.

What Basis for Pupil Promotion?

Modern thought seems to favor the theory of continuous progress and grouping children according to their needs

SUPERINTENDENT Brown was in a high state of frustration. The door had just closed on Mrs. Smith. During the last week the door had closed on a dozen Mrs. Smiths whose dear little Johnnies had not been promoted. "And I want to know the reason why," each one had said.

This Mrs. Smith's boy was just as good as the Jones's boy. Another Mrs. Smith could see no reason why "that teacher takes such a dislike to our girl and won't let her be promoted." And there was a third Mrs. Smith whose son was "a most unusual child."

Superintendent Brown decided to get the figures and see what there was to this business of promotion and retention. The plan followed in his own school system was typical of that used in most cities. The figures showed that during the last ten years retention in the elementary schools had jumped back and forth between 2 per cent and 18 per cent and averaged about 8 per cent. The greatest amount of retention was in the first grade and the least in the sixth.

Why these fluctuations in percentages? He decided to call in the supervisors and principals and find out.

Principals' Ideas on Promotion

The principals and supervisors had ideas. Some said that the children had to meet the curriculum standards or else! Others said the school should adapt its program to the needs of the children. Some had authority for the claim that retention actually was harmful.

Others said a kindergarten should be added to help prepare children for the first grade work.

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It was obvious that the entire system should adopt a new philosophy of the elementary school to govern them in their planning. After a careful study they agreed on the following.

Children Not Hand-Picked

All the children of all the people come to our schools. We cannot pick and choose by taking the best and refusing the others. We cannot set tasks for them too difficult for their abilities. Our schools must develop a program which meets the total needs of all the children. Physical development, social development and social and emotional stability are just as important as intellectual achievement.

Democracy is more than a set of principles; it is a way of living. The children must learn this way of living by helping plan school activities and by making decisions affecting the school.

Attitudes toward work and study, methods of attacking problems, social adaptability, physical growth and emotional adjustment are all major aims in elementary education. Academic achievement alone is not a reliable criterion of a child's progress in school.

Five year olds belong in kindergarten and not in first grade. They should enter kindergarten at a minimum age of about 4.9. Children who have had the social experience of a year of kindergarten acquire a readiness for skills earlier and easier than those who have not had this

training before the first grade.¹

First grade programs should be varied so that children will be grouped according to their needs. Some will begin reading at once. Others will do best under a reading readiness type of program and some, because of their immaturity, should not be exposed to any type of reading program for several months. Authorities place the mental age for beginning reading at about 6-6.²

Grouping is a valuable plan for all levels of the elementary schools since research shows that children in a single grade vary as much as three to five years in any skill or subject tested. These groups should not be permanent but should change from time to time depending on the needs of the children and the purposes of the activity. A grade is not a compact body of subject matter which each child must master before going on. In fact, since 1911, the "grade-standards" theory has been losing favor.³

Grading Systems Are Varied

There have been various methods of trying to meet this problem, such as by the "ungraded school" or calling the group by the teacher's name or designating it as the "9 year olds."

A grade must be defined in terms of the children who are grouped together and of the kind of program developed with them. There is resistance to the idea of abandoning

¹ Morrison, J. Cayce: Influence of Kindergarten on the Age-Grade Progress of Pupils in New York's Elementary Schools, University of State of New York Press, Albany. 1938.

² English Handbook for Teachers in Elementary Schools. Bureau of Curriculum Development, New York State Education Department, Albany. 1940.

³ Caswell, H. L.: Education in the Elementary School, American Book Company, New York City. 1942.

the word "grade" since it is freely used in educational literature and since parents are accustomed to it and feel that it has meaning.

A grade in a modern elementary school could be defined as a group of children under one teacher who, because of age of entrance and physical, mental and emotional maturity, seem to work well together as a unit.⁴ We must place the emphasis on the children instead of on the curriculum.

However, a school is a pretty futile undertaking without some agreement as to what to teach and when. The curriculum should include all of the child's experiences with which the school concerns itself. It must be planned to meet the developmental needs of children at each stage of readiness. It should provide for continuous growth in the skill subjects presented in a form sequential to the learner and each child should be helped to progress in keeping with his individual abilities. It should be adapted to the needs and abilities of each child. It should be planned in terms of the broad objectives of elementary education.

Problem of Eliminating Failure

Ways of eliminating failure should be given careful consideration. One authority suggests the following: case studies of slow pupils, remedial classes, kindergartens and preprimary groups, better individualized instruction technics, reduction in class size and continuous progress plans.⁵

Another suggests that studies be made under such headings as insufficient achievement, insufficient attendance, imperfect health, out-of-school causes, lack of emotional stability and poor administrative practices.⁶

Causes of nonpromotion in order of their frequency as revealed in a survey are: low mentality, too difficult work, excessive absence, excessive moving, poor quality of work, lack of interest, philosophy of the school, poor social background, lack

⁴ Pupil Progress in the Elementary Schools of New York State, Bureau of Instructional Supervision, New York State Education Department, Albany, 1944.

⁵ Encyclopedia of Educational Research. Walter Monroe. The Macmillan Company, New York City. 1941.

⁶ Saunders, C. M.: Promotion or Failure for Elementary School Pupils? Bureau of Publications, Teachers College, Columbia University, New York City. 1941.

of attention to individual differences, poor foundation, poor health, age and physical defects.

These factors should be carefully studied. One important recommendation is that special classes be set up for slow learners with I.Q.'s below 70 or 75. There should also be special classes for children with physical deformities and with such defects as hearing difficulties and impaired vision.

What factors tend to condition a child's progress in the elementary school? Some educators consider that the only reliable criterion for pupil placement is chronological age. Those who believe in continuous promotion would make chronological age the sole factor in pupil placement. There would be no promotion or retention. Generally speaking, this extreme view is not accepted by schoolmen, although chronological age is considered a real factor.

Mental age is an important factor but it cannot be used alone since it is dependent on many other influences. Achievement and physical development are important. Children differ greatly in physical development. This fact should be considered in grouping. Adolescents should not be in elementary grades.

Children vary in social and emotional development irrespective of their general abilities or achievement. These factors must be considered, although the task is not easy. Some schoolmen believe social and emotional development should be included under a single term "personality development." Others say these factors cannot be measured. Some feel that they are included under "mental age" or achievement and physical development.

Growth Levels Analyzed

H. B. Pryor, in a book entitled "As the Child Grows," has analyzed growth levels of children at various ages in some fairly definite ways. The bureau of child development and parent education of the New York State Education Department has some valuable material on the subject. The bureau of child guidance and the bureau of reference, research and statistics for the elementary curriculum planning committee of the New York City board of education has listed "Characteristics of Growth Levels of Children," to be included in a forthcoming publication.

None of these factors considered alone is reliable. All of them, considered together, are significant.

There are three well-defined theories of pupil progress in various stages of acceptance throughout the country. The first is called the "grade standards theory," according to which the children move up the ladder of fixed curriculum or they fail and are held back.

The second is called the "continuous promotion theory." Here, chronological age is the sole factor.

The third is called the theory of "continuous progress." Under this theory policies in promotion are governed by the fact that all children are different. They differ in physical, social and emotional development, in chronological age, in mental age and in progress in acquiring skills. Being different, some will be best cared for by remaining in the elementary school longer than others.

Grouping by Needs Is Logical

The aim is to know each child well so that curriculum and grouping can be planned to meet his needs. The curriculum is developmental in nature and less graded. The adjustment of pupils, grade to grade and group to group, is a continuous process. In terms of doing over the work attempted previously, there will be no repetition.

This last theory seems acceptable since it makes decisions in pupil progress, not in terms of grade standards alone or in the oversimplified terms of chronological age, but in terms of the factors which condition a child's growth and development. These decisions are not made by a single teacher but by the combined judgments of present teachers, preceding teachers, parents, nurses, principals, child-guidance specialists and by the use of carefully made cumulative records.

Superintendent Brown, after studying the various methods of promotion and grading, lost his feeling of frustration. There was much to be done. A new system of cumulative records must be developed and methods of reporting to parents must be revised. Curriculum must be redefined. He reflected on how much more effective he would be in meeting the various Mrs. Smiths hereafter, now that there was some rhyme and reason to his school system's policy of pupil progress.

AUDIO-VISUAL AIDS

Canada Lags in Use of Films

ARE Canadian educational institutions afflicted with problem-blindness? Are other countries more progressive than we? These are questions worthy of debate.

In any such discussion, Canada's record during the last six years is not to be ignored. Canadians have grave problems to solve in education. "As long as the major task of the school is to educate youth with a host of variable factors in terms of pupil, teacher, curriculum, administration, organization, community, there will always be problems to solve." If we did not have them, we would stagnate.

Educational Development Hampered

Physical limitations hinder Canadian educational development. It is a long distance from the Atlantic to the Pacific and from the forty-ninth parallel to the Arctic Ocean. Our nine provinces, each with its own elementary and secondary systems, determine the kind of education our primary and adolescent girls and boys shall have who live in areas south of the sixtieth parallel of latitude.

With the exception of the Yukon, north of that imaginary boundary, church organizations assisted financially by the Dominion government minister to the educational needs of the sparsely settled communities. Beyond the industrial areas of Quebec and Ontario, urban population is in the minority and our rural communities are thinly spread over vast expanses. The traditional little red schoolhouse is still common.

However, let us make no mistake about it. There have been gigantic changes in Canadian education during the past few years and many of them have been progressive. One of these has been the attempt to introduce into Canadian schools scientifically produced audio-visual materials and carefully prepared educational broadcasts as part of the classroom teaching techniques.

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Chicago

To many teachers, who have had blackboards, calendars and picture postcards for a considerable period, the radio and the newer type of visual materials are mere toys, means of recreation and entertainment, something to while away a dull Friday afternoon. One teacher in a rural school said confidentially and apologetically a short time ago, "You know I borrow a silent movie camera and a battery and once a month have pictures. The kids like them."

Seven of the nine provincial departments of education have fairly large audio-visual aids libraries. In general, films, filmstrips and slides are distributed to schools from these libraries free of charge, except for transportation costs. The circulation, particularly of films, reaches fairly staggering figures in some provinces.

The following extracts from the regulations of one department of education, as applied to one or two room schools, reveal some of the principles which are currently fostered. "Two films may be ordered at one time and may be kept for four school days, exclusive of the day of receipt and the day of returning the visual aids to the film library."

Public Must Understand Need

"The department of education is not providing the schools with materials for public entertainment. The audio-visual aids are to be used as a part of the daily work of the school. It is, however, important that teachers' organizations, boards of trustees, home and school clubs, homemakers' clubs and parents generally have the opportunity of realizing the necessity for the use of audio-visual aids in classroom instruction."

But departments of education are not the only organizations develop-

ing libraries of visual materials. Universities and public libraries are taking an ever-increasing active interest in them. At this writing there are 45 film libraries across Canada. Of course, some of them are small while others, such as the National Film Society and the division of visual instruction of the University of Alberta Extension Department, are capable of giving good rental service for both schools and adult groups over wide areas.

Work of Canadian Film Board

Fitting into this picture of the educational utilization of films in provincial and regional areas is the unique work being developed by the National Film Board of Canada. Since the inception of the board, in 1939, it has gradually assumed responsibility for all 16 mm. film productions of the various federal government departments. This has meant a large output of films built up around such themes as war and industry, war experience, the armed services, agriculture, consumer education, social planning, sport, health, industries and nature study.

The purpose of these films is to make Canada better known to Canadians at home and to our neighbors to the south and overseas. They show that each of the many groups of people in our country has made a distinct contribution to the building of our national life. They stress the importance of the Canadian war effort and of Canada's influence throughout the world.

Chief among the nontheatrical distributing agencies for these films are the Canadian film libraries. Many of these films are distributed by the National Film Board on free extended loan to the libraries, while others are sold to libraries and to other organizations at a nominal price set by the board. To overcome the shortage of projection equipment, community-organized projection services have been formed and sponsored in ap-

proximately 45 larger Canadian centers by responsible local groups. While this service is mainly for adults engaged in special educational projects, schools also benefit from the equipment thus made available.

Another valuable National Film Board service is carried out through the medium of film circuits. Introduced as an experiment in January 1942, the number of rural film circuits has now grown to 96. These bring vital information to schools and agricultural communities all the way from British Columbia to Prince Edward Island.

Rural Programs Carefully Planned

Almost one third of the rural circuits are operated by such organizations as the wheat pools and other cooperatives, provincial departments of education and agriculture and extension departments of universities. Rural programs are carefully planned. Discussion booklets and leaflets for teachers and group leaders relate the subject matter of the films to the work and interests of the farming communities which they serve. These sound film programs, brought to the most remote community by mobile projection units, have been responsible for the development of adult discussion groups.

Counterparts of the rural circuits are the industrial and trade union circuits which have the support of both labor and management. Shown to workers within factories and to industrial and labor leaders is a great variety of war-experience and industrial films.

From this brief survey of the situation in Canada, the reader may conclude that Canada is already far advanced in the use of audio-visual materials for educational purposes. It is true that some progress has been made, but many (probably most) Canadian educators and laymen still have the lamentable tendency of looking upon the use of the film, filmstrip and other visual materials as a frill and a fad, as something in addition to the regular program, rather than as an integral part of the educative process. Upon what evidence is this statement based?

Proper facilities for using films and filmstrips in schools, on the elementary, secondary and university levels, are extremely limited and in most cases nonexistent. When projection facilities do exist, they are too

often confined to large auditoriums, where students assemble to see a "show." Many films are presented at the same time and the rapid succession of images, without a prior link with the subject matter of study, confuses the student.

Then, too, Canadian teacher-training institutions have not yet seriously considered the use of films in their courses. Some show films in assembly periods and, when the students return to the regular classes, the instructors tell them how to use films. But such telling is purely an abstraction. The information thus handed out never becomes a part of the regular thinking and planning of the student. Even this telling is limited to a few scattered teacher-training programs.

The teacher in training or the teacher in service will never become familiar with the use of the film until he actually employs it day by day. Valuable as good courses in the use of audio-visual aids can be, they are no substitute for the regular day by day utilization of these materials as a part of the courses of instruction.

New Day Ahead for Teachers

Audio-visual materials can assist in ushering in a new day for the teaching profession. The more expert teachers and adult discussion leaders become in the utilization of films, the greater will be their usefulness.

Research into the value of films for specific purposes is long overdue. We are inclined to take too much for granted or to reject films altogether. Only by research can a true appreciation of various teaching technics be gained. Among the educational problems which we need to solve in considering the possibilities of film utilization are the following:

1. What are the desired ends of education?
2. To what extent should education modify the character and actions of future citizens?
3. What details of subject matter can contribute to the desired ends of education?
4. What is the content of the courses of study for which the film is planned?
5. What should be the basis for the selection of details of the subject matter of the film?
6. What is the mental age at which certain skills can be most economically learned?

7. Do the curricular aims meet the needs of the community or demands of social agencies and how can the film contribute to these needs?

These and a host of other questions must be answered wisely by the film-maker and film-utilizer before the use of such audio-visual materials can become an essential part of the educational experience of our boys and girls and our men and women.

We must learn to read pictures in Canada, for they are a universal language. After we learn this new art of reading, much of the confusion which has arisen from the misinterpretation of words will disappear. Problem-blindness will give way to problem-awareness and, under an enlightened democracy, to intelligent problem-solving as well as international solidarity.

Demonstrates Use of Radio in School

THE Chicago board of education radio council, which operates station WBEZ, and the Illinois Congress of Parents and Teachers recently arranged a demonstration of schoolroom use of radio broadcasts. Sixth graders from the Dixon School, who, with their teacher, put on the demonstration, came in equipped with geographies, scrapbooks, up-to-date maps clipped from newspapers, notepaper and card index files.

During a broadcast of the day's headline news from the war fronts they took notes busily. After the broadcast, the "fun" began. Part of it consisted of bringing out background information about the news. When one boy, for example, identified Gen. Mark Clark as commander of "the 5th Army on the Western Front," he was corrected by a girl who produced a newspaper clipping from a card index to show that General Clark was in command of the 15th Army group in Italy.

When the children were asked what value they derived from their radio lessons, one child said she no longer cared to hear the comics read on the radio and one boy reported, "When our parents talk about the war news at home we know more than they do—we have something on them."

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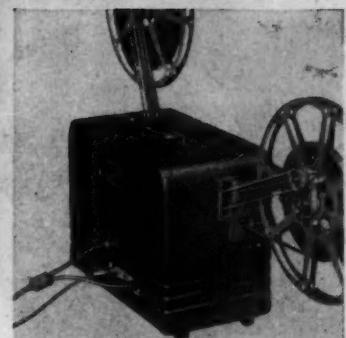
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Improved behavior is another result of serving school lunches.

"HOW do you make that new dish my Tommy ate in the cafeteria last Tuesday? He said it was 'super.'"

Many interested parents now call at the school office to ask questions similar to this, whereas formerly some of them came to school only when a teacher sent for them because their Tommy was presenting a behavior problem.

Today, in Newark, N. J., things are different. Through the leadership and guidance of John S. Herron, superintendent of schools, the need for school feeding has become evident. His appreciation of school and community problems gave our school lunch program real momentum. Doctor Herron supervised school lunches produced by the Works Projects Administration and proved conclusively that there was a decrease

in behavior problems as a result of hot meals served in school.

As a result of his foresight, school administrators, teachers and cafeteria employees inaugurated a program of school feeding which was sponsored by the board of education. In addition, Mayor Vincent J. Murphy and the city commission voted \$25,000 for a penny milk program which made milk available to public and parochial school children as long as the appropriation lasted.

As for the future, I will hazard a guess that school supplies will one day include food for school lunches in addition to books, stationery and other equipment now furnished without cost to public school children. School boards, state boards of education, budget directors and health authorities may find it necessary to acquiesce to this as a coming

innovation and should use foresight in planning for it.

Because of political persuasions or other reasons, taxpayers may raise their voices to protest: "Feeding school children is the duty of the parents and the home." This may have been true in the past but, judging from the large number of young men rejected by the armed services for causes related to malnutrition, it would seem that many parents and homemakers have made a dismal failure of the job of feeding their families properly.

Good Food Habits Improve Health

Underweight, frequent colds, anemias, defective vision, poor tooth and bone structure with attendant physical handicaps might have been prevented or corrected in many cases by good food habits. To develop desirable eating habits in children, better parent education may be necessary although some parents who have had many educational advantages often rear children who prove "difficult" because of faulty eating habits acquired at home. Parent study groups interested in nutrition and child development could continue or carry on the teaching of good food habits begun in the school cafeteria.

In Newark's school cafeterias for the last three years elementary school children have been taught to eat all foods that are served; they have no freedom of choice in selection. Secondary school pupils, however, are allowed this freedom. We have already achieved favorable results, such as increase in weight, arrested dental caries, improved attendance records, greater achievement in scholarship,

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NOURISHING, APPETIZING hot food is important in a school cafeteria. Hotpoint-Edison Electric Cooking Equipment simplifies the job of consistently producing delicious, nutritious food that your students will like. Electric cooking is clean . . . there'll be no smoke or soot in your kitchen. It is safe . . . no fire hazard because there is no flame or inflammable fuel. Your kitchen will be cool . . . your help will be comfortable and capable of more efficient production. The compact units are more convenient and much simpler to operate. Take advantage of these features of electric cooking to simplify your scientific food engineering.

Cooking Electrically Saves Money, Too!

1. Food is uniformly excellent . . . no spoilage or waste. Less shrinkage.

2. Wage dollars saved . . . better working conditions result in more contented, efficient help. Automatic temperature control means less help can handle greater amount of work.

3. Only one service necessary for light, power and cooking.

4. Savings on longer-life equipment with lower maintenance . . . clean cooking means less kitchen renovating.

Government regulations now permit manufacture of equipment for essential civilian use. If your present equipment is inadequate or beyond repair, consult your local distributor or write Hotpoint.

Edison General Electric Appliance Co., Inc.
5696 W. Taylor Street, Chicago 44, Illinois

Hotpoint Dependability Assured by 40 Years Experience !

HOTPOINT REGIONAL SALES OFFICES. EASTERN: 570 Lexington Avenue, New York City 22, Plaza 3-9333. SOUTHERN: 304 Red Rock Building, Atlanta 3, Walnut 2959. CENTRAL: 1456 Merchandise Mart, Chicago 54, Superior 1174. WESTERN: Western Merchandise Mart, 1355 Market Street, San Francisco 3, Underhill 2727. IN CANADA: Canadian General Electric Co., Ltd., Toronto, Ontario. Selling through leading Kitchen Equipment Distributors

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MANUFACTURERS OF ELECTRIC
COOKING EQUIPMENT

HOTPOINT EDISON

COMMERCIAL ELECTRIC COOKING EQUIPMENT

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Vol. 3

less defacing of school property and better pupil-teacher relationships.

In an elementary school cafeteria, where we feed 233 pupils a day, a summary of the pupils' weight charts revealed the following information:

Total number of children fed daily: 233

Number of children who gained weight: 204

Number of children who lost weight: 29

Probable causes for loss of weight:

18 had contagious diseases

2 had operations

3 had just started to eat in the cafeteria

6 unaccounted for

A principal of another elementary school in a low income area where many behavior problems were encountered opened a cafeteria. The afternoon attendance records immediately improved when children ate lunch at school. At the end of the first year of school feeding, morning absenteeism decreased 70 to 80 per cent. There was less evidence of afternoon fatigue and crayon and pencil markings on the walls of the school building decreased.

Cafeteria Creates Pupil Activities

Some restless and hitherto disinterested pupils became class leaders in arithmetic and home economics for the school cafeteria opened up new avenues for pupil activities. Upper grade pupils volunteered to become cashiers, waitresses and cafeteria monitors. Boys and girls welcomed opportunities to volunteer their services in behalf of younger sisters and brothers who patronized their school cafeteria. Friendships grew up between pupils and teachers, once they began to eat together and to chat cheerfully over the luncheon tables.

How has this been accomplished? In our public school feeding, we provide boys and girls with experiences which build wholesome routinized health habits, such as hand-washing, good posture, eating balanced meals, table etiquette, neatness, cleanliness, conservation in handling foods and consideration of others, so that they may become better citizens. Children, who acquire good food habits while young are less likely to lose time and valuable experiences in school through illness and absenteeism. At present many mothers and fathers are working in Newark's numerous



Lee Drucker O'Sullivan, Maplewood, N. J.

School supplies may one day include food for school lunches.

war industries but we have no guarantee that mothers will return to their homes to prepare suitable noon meals for their children when the present war production emergency ceases. In a technological and industrial society, more and more parents have become accustomed to eating lunches outside the home.

In postwar planning, shall we not consider the food needs of the children of these parents? Shall we not make certain that we furnish one third of the daily food needs of our children while they are entrusted to our care for six or more hours of each school day? Shall we not concern ourselves with the development of the whole child and integrate the opportunities for good eating habits with his school day's experience?

School Lunches a Postwar Demand

During the war many workers have migrated to different parts of the country and have established new homes where they hope to remain if postwar employment is available. Postwar industries will need these skilled workers. How may communities hope to retain them if means are not provided for serving noon meals at school to their children? Thus the school cafeteria becomes an essential part of postwar planning since schools may be required to accept this additional responsibility with the changing times.

Providing school lunches may seem like a gigantic investment for conservative communities to undertake and some teachers may say, "What next?" But in later years, when the same communities must

equip and maintain free clinics to correct pathological conditions which result from malnutrition, they may appreciate that an earlier program of preventive medicine, in which school lunches were included, might have saved them large sums of money. A school cafeteria program is a long-term investment which will yield dividends eventually to the taxpayer in a healthier citizenry.

If we think of the school as the center of the community, then it should offer any and all services required by that community. Progressive school administrators would not think of omitting library or school nurse services from their curriculums yet there are educators, hidebound by political beliefs or traditional practice, who consider the school cafeteria just an administrative headache instead of a vital educational service for school children. It is essential to have an adequate feeding program suited to the needs of the individual community.

Well-Fed Children a National Asset

In some respects there are valuable lessons to be learned from European methods of school feeding. In the midst of food shortages in a country at war, a European school teacher was asked by an American visitor: "Why do you feed all those children in school?" and the teacher replied: "Some day we'll need them."

Americans, take heed! Some day we'll need healthy bodies and sound minds for a better peace-time America and a complete lunch at school for every child will help to give America this assurance.

Common-Sense Engineering Helps

ROGERS B. JOHNSON

Former Superintendent of Building Maintenance, Harvard University

IN THE design of educational buildings, common-sense engineering is fundamental. Common-sense engineering means the proper balance of the various elements of material and design. Special effects, unique arrangements, gadgets of all shapes and descriptions and optimism regarding new and untried materials must all be woven into a complete building fabric.

Roofs are primarily waterproofed building members and any detail of design or of construction which compromises their primary function should be discarded. Pitched roofs are most satisfactory when they are not cut up by a multiplicity of valleys. Such valleys as are essential to the design should be open, as it is exceedingly difficult to find and repair easily leaks in the so-called "closed" type. The essence of flat roofs is the flashings and it is of great importance that these be made of proper material. If the material is copper, they should be fastened with copper nails, not iron.

Parapet walls at the lower edge of pitched roofs are prolific causes of snow dams and winter leaks.

Gutters an Important Detail

The location of gutters is a detail frequently dictated by architectural considerations rather than by common sense. No designer should be so optimistic as to conclude that gutter leaks are never possible; they are always just around the corner. For this reason gutters should be located so that leaks will not insidiously damage the building structure. From this point of view the overhanging gutter is to be preferred to the one that is directly over a brick wall. In some buildings it may be possible to have hanging gutters or even to leave the gutters off entirely and provide drainage around the buildings to take care of ground-level water.

Conductors may be of the inside or outside type. If the building

is never to be closed and is in a northern climate, the inside conductor is preferable as it will never freeze. However, any leak is likely to be serious. On flat roofs the inside conductor is the general rule but no inside conductor, flat-drained roof should ever be designed without some type of scupper or emergency overflow provided below the top of the flashings so that if the inside conductors are plugged up, as they may be by leaves or other rubbish, a deluge will be avoided.

Snow Brings Special Problems

In northern climates roofs must be so designed as to avoid ordinary snow hazards. Snow slides, snow guards and the damage that the snow slides may do must be carefully considered. The other phase of snow trouble is the stoppage of gutters, valleys and conductors by accumulations of snow or ice formed by the freezing of the water from the melting snow. Occasionally steam pipes are put in gutters and conductors to melt snow and ice, but it is much more satisfactory to design roofs so that the danger of stoppage by freezing is reduced to a minimum.

Flashings frequently cause compromises to be made between watertightness and design. Cap flashings of parapet walls should be complete watertight "roofs" over the masonry. The practice of putting flashings under capstones and stopping them just short of the edge of the masonry invites trouble. They should extend not only out to the edge but over the edge and should be turned down to form a proper drip. The same should be done with through-wall flashings but seldom is. This applies also to the protection to the top of any free-standing brick wall.

In using brick for the outside of

a building, great care should be taken to select one which is hard enough so that it will not disintegrate if it is exposed to undue moisture. In this connection, base courses of granite or other moisture-resistant stone to take the spatter of rain bouncing from the ground are desirable unless really hard-burned brick is available. Cast stone is not as permanent a material as brick or natural stone but in some cases price considerations may dictate its use.

In the selection of mortar there is a great deal of science in choosing not only a type of mortar but a type of joint and workmanship which will produce a watertight wall. In the case of stone cornices, it is desirable to protect the top with metallic flashings. The stone itself is watertight but it is difficult, even with the various plastic calking compounds, to keep the joints watertight and water that gets into them has a disagreeable habit of finding its way into the masonry below where it causes bad stains and deterioration. If such metallic flashing is not installed, one of the plastic calking compounds should by all means be used in the joints and, furthermore, this should be replaced frequently enough to prevent insidious and damaging leaks.

Improper Drips Cause Staining

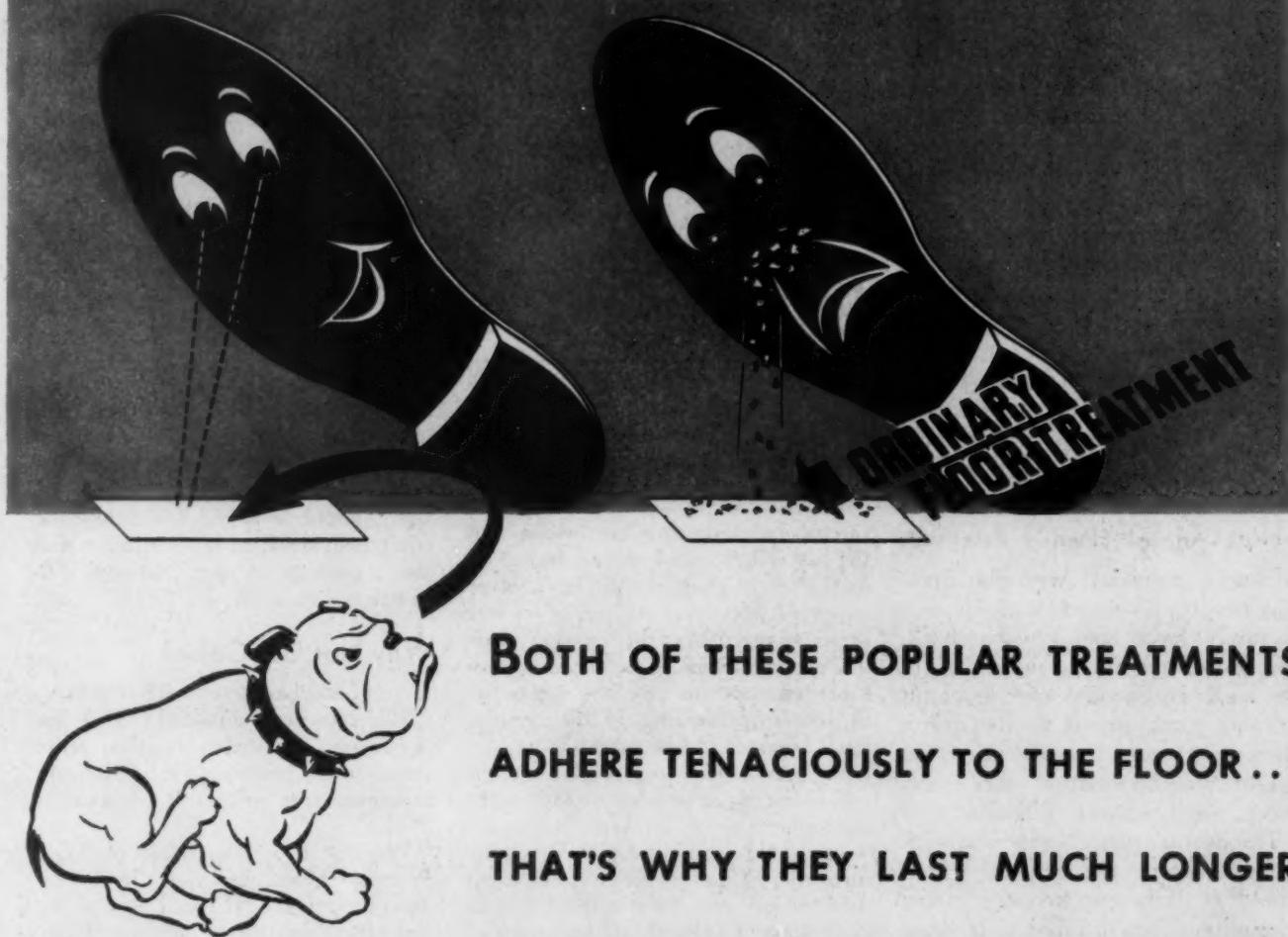
The entire building design should be checked to see that proper drips are provided wherever necessary so that water will drop clear of the building wall and not run down over it. Improper drips are probably more responsible for water-stained exteriors than is any other factor.

The outside iron work on buildings is difficult to maintain as its protective coating of paint generally does not last as long as that of the rest of the building and it seems to be human nature to neglect small amounts of iron work until the whole building is painted.

(Continued on page 60)

HERE'S THE WHY OF "WEAR"

...when it comes to Floor Treatments



WHY do ordinary floor waxes . . . especially those loaded with resins and substitute waxes . . . wear out so quickly? There are two reasons. First, such resinous waxes soon disintegrate and actually wear out. Second, they invariably lack the requisite adhesive qualities that make them adhere to the floor instead of to the feet . . . and consequently wear off as well.

Both Car-Na-Lac and Continental "18" are made from the best carnauba wax . . . which is practically indestructible. They can't wear out! Furthermore, both are uniquely processed to adhere tenaciously to the floor . . . making them economical to use. They take a long time to wear off! Want proof? Send for liberal experimental sample.

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Acts like a lacquer made of wax. Applied with the usual wax applicator. Levels out as it dries, resulting in a uniform, streakless, lacquer-like gloss. "Self-polishing" . . . dries in 15 to 20 minutes. Car-Na-Lac has at least twice the wearing qualities of ordinary water waxes and is waterproof, non-slippery. Adapted for all floors except unsealed "raw" wood.

Exactly the same as Car-Na-Lac except that it contains about 38% more solids. Heavier solid content gives a higher gloss and reduces the number of applications necessary. Covering capacity averages the same as Car-Na-Lac, but one coat does the work of two. Recommended by a leading national liability insurance company for safety. Meets U. S. Treasury Specifications for "Finish Material" (and Proposed Federal Specifications for Item 9, Type II).

The actual design of such details as railings and lanterns is frequently to blame for their early deterioration. Interstices, which are difficult to paint and in which moisture can lodge, such as occur when railings are made of two pieces of metal fastened together with screws, invite trouble.

Outside steps are a frequent source of accidents. They should be designed with regard to safety and it may be worth while to install some type of nonslide treads. If limestone is used for treads, it is so soft that it wears down easily and the edges may chip. On the other hand, if granite is used, it will polish smooth in time. Slightly curved steps may be interesting in appearance but they are a definite hazard.

The careful checking of ground water levels for the determination of the extent of basement waterproofing is essential. This waterproofing must include proper reinforcing of any basement floor slab against the upward pressure of ground water.

Provide Against Flooded Basements

Closely connected with the question of ground water levels is that of sewer levels and possible back-ups of sewers during heavy rains. No basement should ever be built without some provision for draining excess water into the sewer if, due to some accident or other emergency, the basement is flooded.

The heating plant is generally well thought out by the designer but it would be wise to investigate the feasibility of heat insulation, possibly in the form of roof insulation or even double glazing in windows.

The problem of air conditioning should be studied and its cost weighed against service expected. If air conditioning is decided upon, the provision of proper vapor stops to prevent condensation is essential. It is just not possible to air condition an ordinarily constructed building because of this moisture difficulty.

The problem of proper artificial illumination is too large to discuss here. Suffice it to say that standards are ever on the increase and electric mains should not be skimped.

Plumbing should be laid out in the spirit of pessimism since plumbing pipes, both water and drainage, are bound to leak or be plugged up at some time during their lifetime.

They should be easily accessible for repair besides being of suitable material for the particular type of water and service. It is exceedingly desirable to have floor drains in all toilet rooms and to have toilet room floors waterproofed.

Many service needs are all too frequently forgotten. The buildings must be kept clean and proper janitor's closets and slop sinks must be provided. Rubbish chutes, storage of rubbish in fireproofed or sprinkler-protected rooms, installation of incinerators and storage space for janitor's supplies, all should be carefully considered. If a building is a large one, proper space for the janitor's office and lockers and toilet

facilities for his assistants should be provided.

The foregoing are the most important features of design which must be taken into consideration in the common-sense engineering of educational building construction. In arriving at the final compromise as among cost of construction, desire for unique appearance and usefulness for educational purposes common sense must be continually emphasized. The fact that the unforeseen not only may happen here but can happen here should at least make questioning optimists, if not downright pessimists, of any committee members who are looking over plans for a proposed building.

BETTER PLANT PRACTICES

Beware Inflammable Solvents

Even when used in small quantities, flammable solvents, such as gasoline, naphtha, benzene and acetone, require careful handling, we are warned by the Safety Research Institute, Inc., New York City. They should be kept in approved safety cans and applied where there is no danger of ignition from flames, mechanical or electric sparks, or high temperatures resulting from fire or friction. Smoking in the area of application should be prohibited.

To prevent disastrous explosions, the concentration of solvent vapor in the atmosphere must be kept below the lower explosive limit by using equipment that minimizes the escape of vapor into the air and by supplying a sufficient amount of fresh air by means of natural or mechanical ventilation. In practice, the vapor content of the workroom air should be kept below the "maximum allowable concentration for continuous exposure," which is basic protection against both toxicity and explosion.

Good general ventilation does not eliminate the localized fire hazards created by volatile flammable solvents, however. Special precautions must be taken to prevent the ignition of spills, creeping vapors, which may travel 100 feet or more from the point of origin; vapors collected in low places, such as pits or basements, and the explosive vapor-air mixtures that remain in containers emptied of solvents.

In removing all possible sources of ignition from areas in which flammable solvents are being handled, enclosed explosion-proof electrical equipment should be installed in accordance with

the National Electrical Code; nonsparking bronze tools should be used, and workers should be provided with shoes made without nails. Flammable solvents should be stored and handled in equipment installed in accordance with the standards of the National Fire Protection Association.

Why Not Use Color?

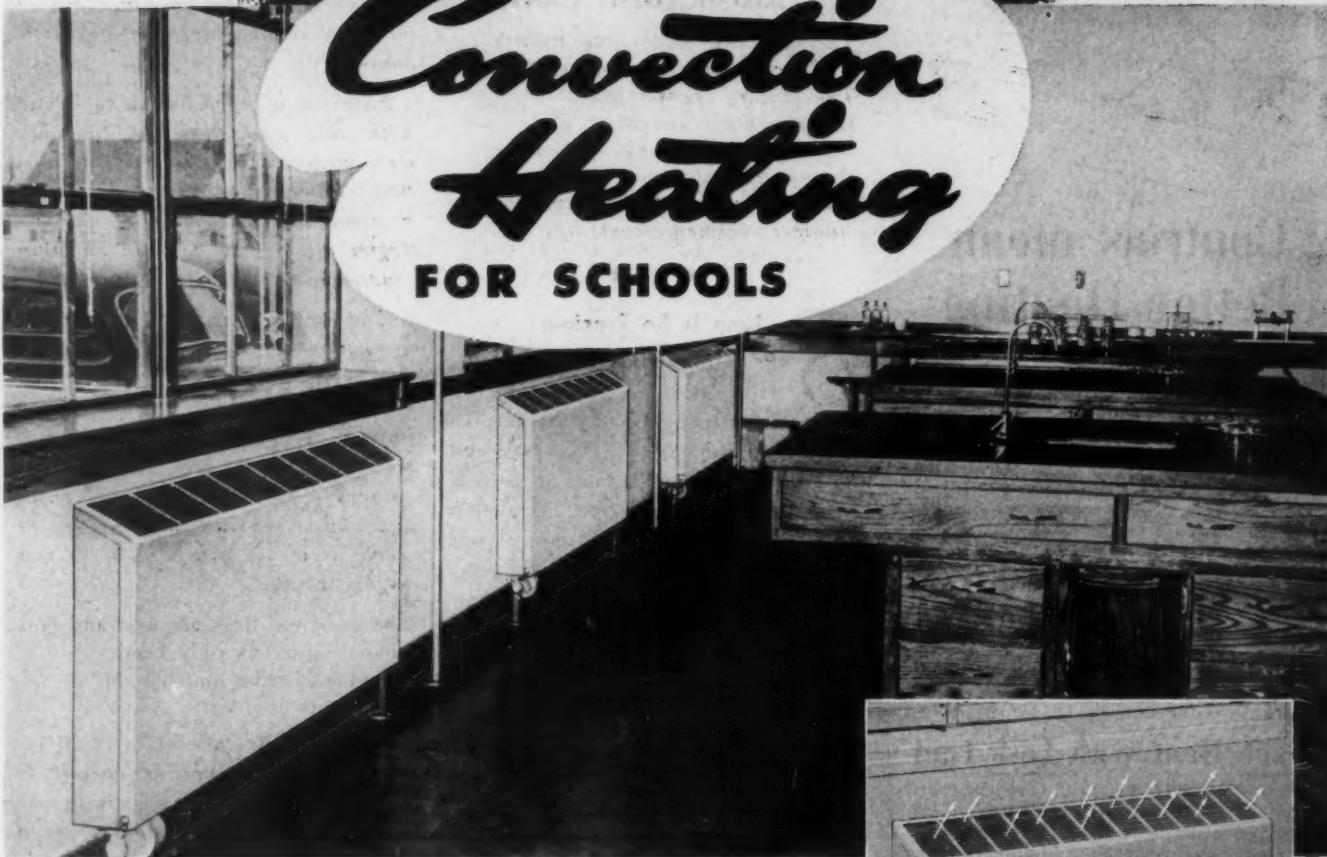
Another advocate of color in schools, which has been advocated long and persistently in these columns, is revealed in the person of D. E. McGrath, superintendent of buildings, Pontiac, Mich.

Writing in a recent issue of *School Business Affairs*, he says: "In decorating our postwar school, I would suggest that we throw overboard any thought of standard colors, such as the old-time ivory ceiling and buff sidewall, which were predominantly used for so many years. It costs no more to use pastel tints and attractive colors for our sidewalls, varying them throughout the building. Certainly we can relieve the sameness that has been such an evil in the past."

"As you know, certain colors give best results depending on the exposure of the building to light. Because of artificial lighting, we are almost bound to have ceilings of extremely light ivory, or off-white, but for sidewalls we can use the pastel tints of ivory, blue or gray; in the case of a north exposure, pleasing tints of buff really give best results. From a maintenance angle, I do not believe the cost of this type of decorating is a factor. It merely requires a little more thoroughness on the planner's part."

Convection Heating

FOR SCHOOLS



- Because of its many distinct advantages, Convection Heating with copper convectors . . . either used alone or in combination with central or individual room ventilating systems . . . is being specified for many modern schools now on the drafting boards.

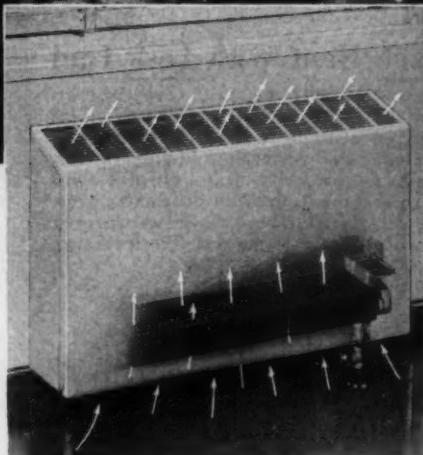
Totally unlike unsightly conventional cast iron radiators . . . Modine Convector units have a modern streamlined simplicity of design. Unobtrusively attractive in appearance, Modine Convector units blend harmoniously with any style of room interior.

Being made of copper . . . second only to silver in speed of heat conductivity . . . Modine convector units heat up faster . . . are almost instantly responsive to automatic control. When desired room temperature is reached, and convector is automatically cut off, there is

very little residual heat to cause continued build-up of temperature. These are important advantages over conventional radiation.

Used in conjunction with central or individual room ventilating systems, copper convectors have another important advantage. Between afternoon and following morning heating periods, or over week-ends, temperatures sufficiently comfortable for persons doing janitorial work can be maintained by the convectors alone. No need to incur the expense of operating the entire system with its many motors, dampers and blowers. In addition convectors protect plumbing fixtures and pipes against freezing.

The Modine Convector units shown are the Wall Cabinet type. Projection Recessed and Floor Cabinet types are also available.



More Seating Space Available with Convector . . . Students may sit close to windows in comfort. Drafts of air falling down along the windows are intercepted by heat from convectors located in outside walls. Students sitting or working close to convectors are never made drowsy. The heat is convected. There's no concentrated radiated heat to affect them as with conventional radiators.



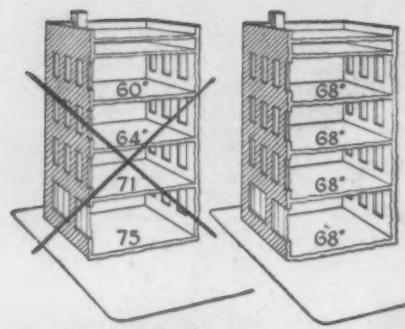
Look in your phone book for Modine representative's name — "Where to Buy It" section.

For Details . . . Get Modine Catalog SA-44



Modine Convector

MODINE MANUFACTURING COMPANY • 1832 RACINE STREET, RACINE, WISCONSIN



Controls mean Better Heating

Good heating means adequate heat at a reasonable price—rooms that are always comfortably warm... No cold waves... no sudden rushes of heat... no waste of rationed fuel.

The logical answer to overheating and underheating; the logical answer to fuel waste is control—control that delivers the right amount of steam to each radiator.

Webster Moderator Systems of Steam Heating are "Controlled-by-the-Weather." An Outdoor Thermostat automatically adjusts the delivery rate of heat to agree with changes in outdoor temperatures. Through accurate orificing, all radiators receive steam at the same time, in varied quantities as needed.

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Fine Savings
Start With
CONTROL

AUTOMATIC
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CHALK DUST

COMMENCEMENT CANTO

The orchestra moans and stutters
Its "Pomp and Circumstance";
The visiting speaker utters
His weightiest utterance;
There are whisperings and mutters
As innocent infants cry
But in spite of splutters and sputters
Another commencement slips by.

Time Is So Precious

ONE of our correspondents asks: "How does a school superintendent ever find time to play golf like other human beings?" The crude and obvious answer might be that, according to our limited research, he doesn't. This is scarcely fair to a few of our holers-in-one, however.

For the benefit of any golfing superintendents who may still exist in these hectic days, it is suggested that they employ a secretary who has been successful as a receptionist in a sour-pickle factory and who may be partially equipped to handle some of the converging mammas. Or better yet, build a 6 foot barbed wire fence around the school. This will tend to keep out some of the fatter salesmen of seeds and Christmas cards and present an effective barrier to other annoyances.

With most visitors thus under temporary control, the school administrator may sneak away for a couple of hours to practice his future approaches. It may be well to take the entire board of education along to the links, not in their usual capacity as a personal bodyguard but to give them a few good laughs, something they don't often get in their official capacity.

Superintendent's Swan Song

The good old days have slipped away,
The quaint old times have fled,
The customs of a former day
Are withered, cold and dead.

Thus the superintendent ponders as he never pon'd before, for he sees his entire faculty departing by the score. The Wacs, the Waves, the Wrens, the Spars are calling urgently, and shining salaries beckon in every industry.

Yet teachers were so plentiful a few short years ago that the pedagogues were yelping at the mighty overflow, and superintendents held their jobs not

through their own puissance but the fact they could deliver for politician's aunts.

Each list of applicants was scanned with cold evaluation, as candidates were measured by the board of education. The canny superintendent would hem and haw and wait, while the third degree was given to each shrinking candidate.

The luckless one was questioned on her nationality, with sundry little probings in her family pedigree. She was asked about her boy friends with an implied reprimand; her singing voice was tested and her reading habits scanned. The tints upon her cheeks and nails were carefully assayed; her feeble views of discipline were thoroughly x-rayed.

The good old days are past and gone,
Change rears its ugly head,
Relentlessly time marches on,
All dignity is dead.

Today behold the candidate (if candidate there be), who marches in the sacred sanctum grinning cynically. She checks the salary schedule and the superintendent quails, as she opens up her handbag and manicures her nails. Her attitude and actions display animosity, when she casts polite aspersions on the district's solvency.

But the hopeful superintendent sees nought amiss, nor hears. He knows that he will grab her, if she's under eighty years. If he can gain assurance that all life has not yet fled, he will quick produce a contract—for the good old days are dead.

Dear Supt.: I have stood an awful lot from you and your teachers without yelling half as loud as most of the taxpayers in this city. But there is a limit to your foolishness. When you sent home William's census card for correction you certainly hit a new low. You listed William as a caucasian. I want you to know that both William and his father are white Americans and so am I and we go to church regularly. Personally, I think you are probably a caucasian yourself.

True S. M. Officer

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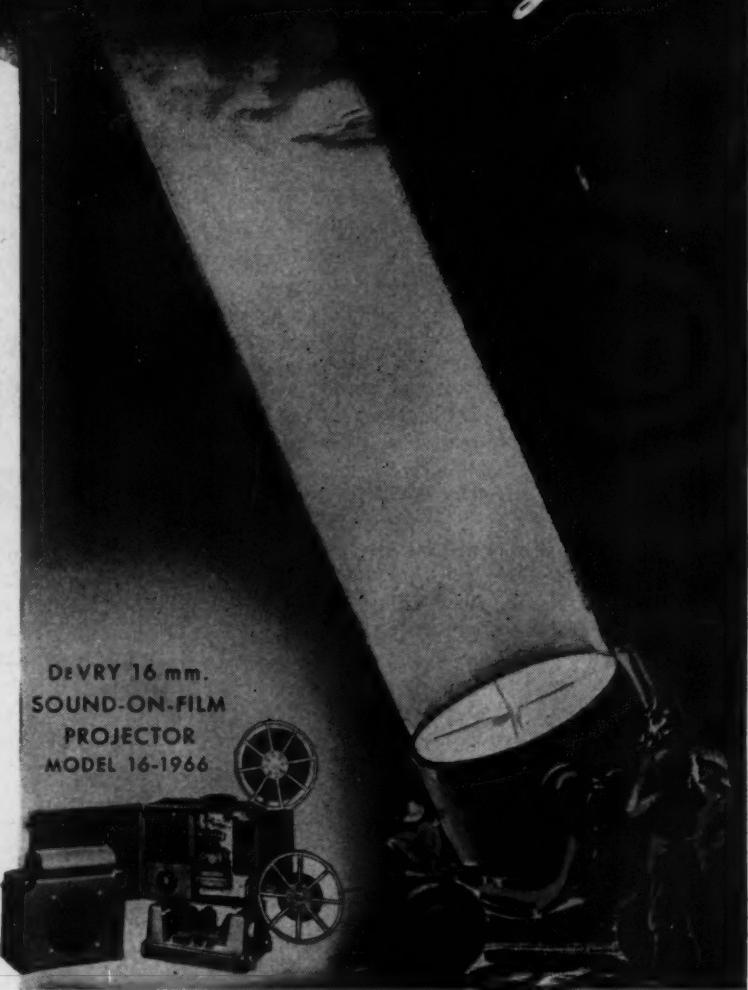
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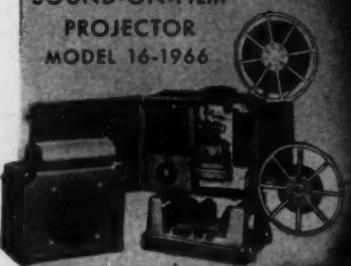
DEVRY "searchlight-steady" projection gives you the clearest of black and white detail, the full splendor of natural color, everything, on the film—rock-steady, "Nature-Real."

Your DEVRY 16mm. sound-on-film projector is a 3-purpose unit that (1) safely projects BOTH sound and silent films; that (2) projects BOTH black and white and color films without extra equipment; and (3) with 25-watt amplifier and sturdy 12" speaker in separate balanced carrying cases to provide you with portable Public Address facilities—indoors or out.

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WASHINGTON NEWS

By EVA ADAMS CROSS, Special Correspondent

Federal Funds for School Plans

The Congress has appropriated \$17,500,000 to make loans available to states and their political subdivisions for preparing postwar construction plans. Fully 60 per cent of this fund will go to schools, it is believed.

Further Congressional appropriation will be made as the need is shown. The sum of \$78,000,000 was sought and may yet be available if sufficient sound, well-engineered projects appear in the applications received.

The amount is available to the public agencies in each state in accordance with the per capita formula prescribed in Title V of the War Mobilization and Reconversion Act of 1944.

Applications for advances are to be made through the eight division offices of the bureau of community facilities of the F.W.A. Advances are to be repaid without interest charge when funds become available to the applicant to construct the specific public works for which the advance was made.

Advances will not be approved for reimbursing an applicant for any disburse-

ment made to defray costs incurred prior to the approval of an application. Nor shall funds advanced be used for the acquisition of land.

Compromise School Lunch Bill

Companion school lunch bills, S. 962, introduced by Senator Russell for himself and Senator Ellender, and H.R. 3143, introduced by Representative Flannagan on the same day, May 7, went into immediate hearings in the House committee on agriculture with all groups having an opportunity to be heard.

To date, the bills seem to have effected a fair and estimable compromise among several opposing schools of thought as to what constitutes a sound program of federal assistance for a permanent school lunch program.

The bills look like a carefully revised S. 503, introduced several months ago by Senator Ellender and sponsored by the woman's joint congressional committee on school lunch legislation. However, the Flannagan Bill is being gone over line by line for amendments and some of the sound basic principles em-

bodied in S. 503 and the new bill may be lost in too much revision. On the other hand, it stands a chance for improvement.

Should the two-title bill, which asks for each fiscal year, beginning June 30, 1946, an appropriation of \$100,000,000, come through the committee in fair shape, it will face an economy-minded Congress. The current appropriation is \$50,000,000. Congress, too, may object to the two-title feature as a questionable division of authority.

Title I, "Assistance in Providing Food," calls for such sums as may be necessary, not exceeding \$100,000,000, to enable the Secretary of Agriculture to carry out the provisions of this title.

Called a "National School Lunch Act," H.R. 3143 would encourage the domestic consumption of nutritious agricultural commodities and other foods by assisting the states through grants-in-aid and other means in supplying foods and facilities for the establishment, operation and expansion of school lunch and nutrition-education programs.

The states would get not less than 75 per cent of the funds appropriated for each fiscal year, the basis of apportionment being the number of school children and the need for assistance. Public and nonprofit private schools of high school grade or under would receive this assistance. A recent amendment includes nonprofit child care centers also.

Funds would be disbursed by the state educational agency to assist schools in supplying agricultural commodities and other foods for consumption by children in the school lunch program. Such payments during the period from 1946 to 1950, inclusive, would be made upon condition of matching funds.

State educational policies are preserved in that neither the Secretary of Agriculture nor the state shall impose any requirement with respect to instruction or teaching personnel in carrying out the provisions of the bill. No funds shall be paid to any state if it makes any discrimination because of race, creed, color or national origin of children.

Title II, "Assistance in Providing Nutrition Education and School Lunch Facilities," authorizes for each fiscal year \$15,000,000 to enable the U. S. Commissioner of Education to carry out the provisions of the title.

Companion Federal Aid Bill

Introduced in the House April 23 by Congressman Lesinski was H.R. 3002, a companion bill to the Mead-Aiken S. 717, to authorize the appropriation of funds to assist the states in financing education more adequately.

School Lunch Appropriation Approved

The appropriations bill for the U. S. Department of Agriculture for the fiscal



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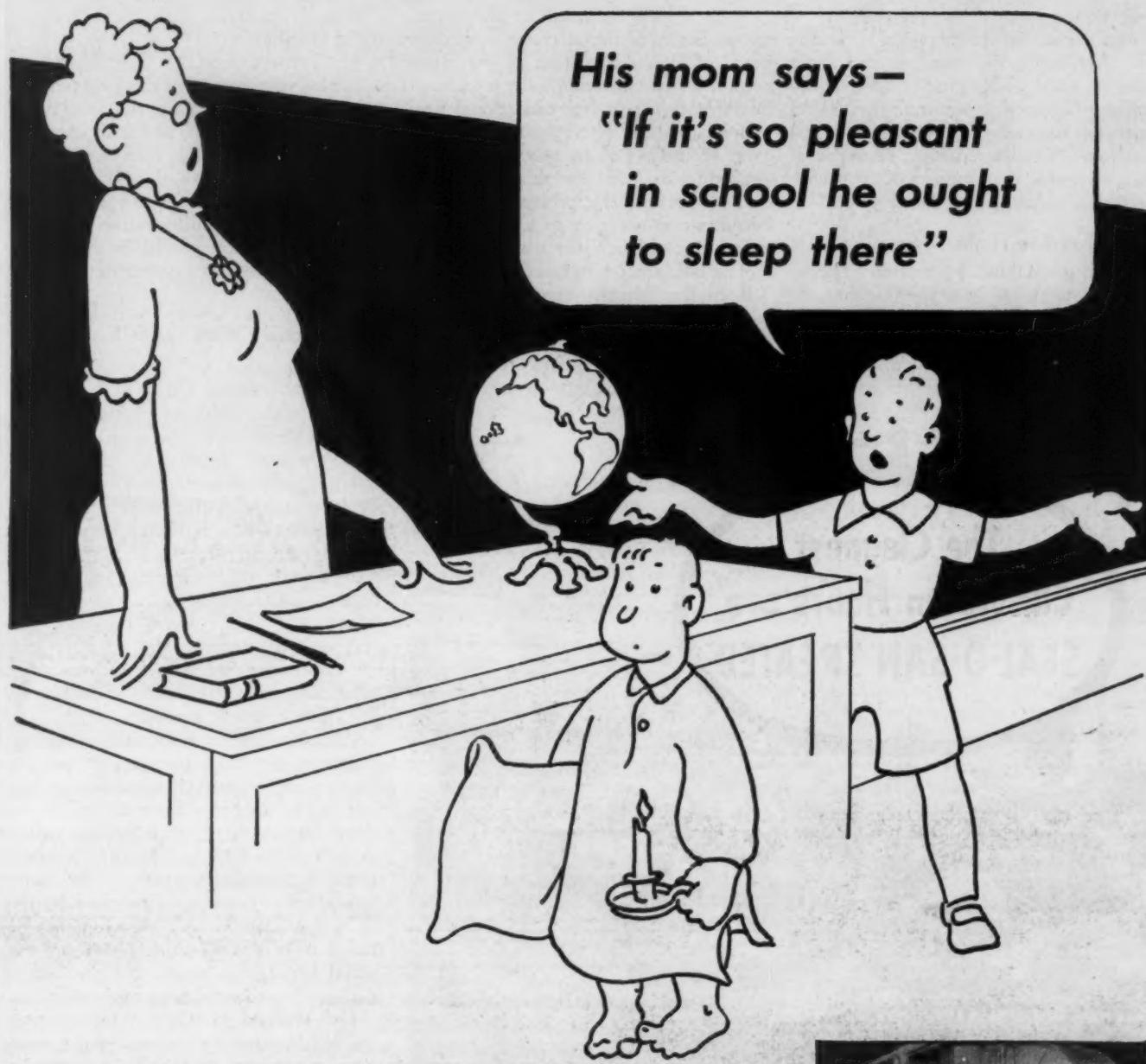
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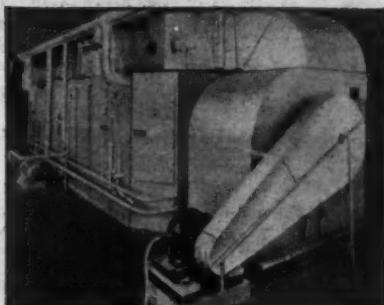
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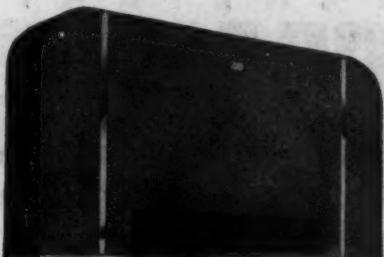
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year ending June 30, 1946, which includes the school lunch program, awaits the President's signature as this issue goes to press. The sum of \$50,000,000 was appropriated to continue the federal financial assistance for the school lunch program. The Department of Agriculture estimates that some 5,000,000 children will participate in the program.

Federal Aid to Higher Education

A bill to establish a temporary agency to be known as the Commission on Emergency Federal Aid to Higher Educational Institutions was introduced May 3 by Representative Barden, chairman of the House committee on education.

H.R. 3116 is the result of painstaking investigation of the advisory committee, study of higher education, of the House committee on education, of war-impaired effectiveness of higher educational institutions in the United States. The purpose of the act is to provide for compensating in part for this impairment and to prevent the present crisis from becoming so acute as to undermine the structure of higher education.

The bill incorporates Recommendation VII of the advisory committee's report to establish a nonpartisan, independent agency of the United States to receive and approve applications for stand-by and other service contracts and to nego-

tiate such contracts with higher educational institutions.

An appropriation of \$25,000,000 is asked for the purpose of carrying out the provisions of this act for the fiscal year ending June 30, 1946, and such sums as may be necessary for each fiscal year thereafter. Not more than 1 per cent of the appropriation for any fiscal year shall be used for administrative purposes.

The commission would be composed of seven members appointed by the President.

International Office Gains Support

The campaign for the establishment of an International Office of Education gained further support April 30 with the introduction by Senator Fulbright of a resolution urging participation by our government in the establishment of an International Office of Education.

Similar to that introduced by Representative Karl Mundt, the resolution recommends the organizing of a permanent international agency to promote educational and cultural relations, the exchange of students and scholars and the encouragement within each country of friendly relations among nations, peoples and cultural groups.

Proposals for an international agency of education have been made by the Educational Policies Commission of the N.E.A. in an open letter to the U.S. delegation to the United Nations parley at San Francisco and by the International Education Assembly. The function of this agency, says Belmont Farley of N.E.A., would be the elimination of racial bigotry and militarism from the social heritage of youth and the substitution of understanding and tolerance.

Dr. William G. Carr is representing the N.E.A. and the International Education Assembly at the San Francisco world conference, while Dr. George Zook at the invitation of the State Department is acting for the American Council on Education.

Hearing on Postwar Military Policy

The committee on postwar military policy will hold public hearings on postwar military training June 4 to 16. The hearings will be on the broad general subject and not on any particular bill or proposal. Individuals, organizations and representatives of the armed services will testify. Members of Congress will have an opportunity, at the conclusion of the public hearings, to state their views.

The committee has no legislative authority and any legislative action that might be taken would have to be in the usual form of the introduction of a bill followed by routine legislative procedure.

The Committee on Postwar Military Policy is composed, in addition to the



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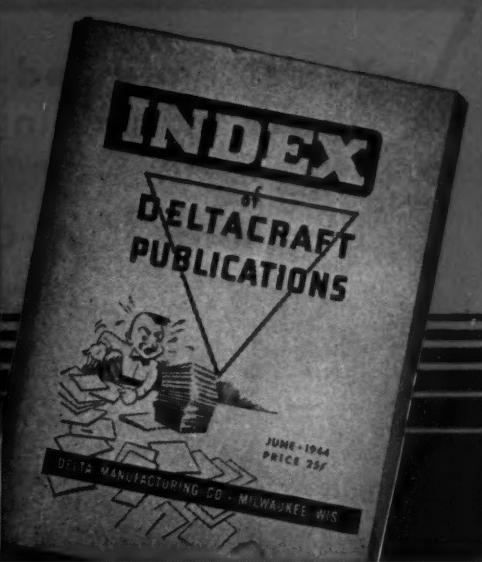
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chairman from the appropriations committee, of the high ranking majority and minority members of the naval affairs committee, the military affairs committee and other members from the House at large.

May Liberalize Rehabilitation Laws

A bill to liberalize and clarify vocational rehabilitation and education and training laws administered by the Veterans Administration was introduced in the House May 3. The bill covers amendments concerning length of training; disposition of returned books, supplies or equipment; increase of pensions, compensation, retirement pay; eligibility for receiving education or training, and tuition and fees paid to educational or training institutions.

"Physical Education Act of 1945"

A bill introduced May 6 by Representative Landis would provide funds to assist the states in school physical education, educational health service and vocational guidance programs. The sum of \$40,820,000 for each fiscal year is authorized. The bill would permit no exercise of federal control over educational policies of states and localities.

The U. S. Commissioner of Education would apportion annually to each state, complying with the provisions of the act, a sum of \$92,000 per congressional district therein. Of this sum, \$46,000 would be used by the state in connection with programs of physical education, and \$46,000 in connection with programs of vocational guidance.

Surplus Property Disposal

A large part of surplus war property being in short supply at present, the Surplus Property Board on May 7 issued Regulation No. 2 giving priority to federal agencies and state and local governments. This will benefit state and local tax-supported schools.

The regulation provides a method whereby the preference ratings established by W.P.B. may be fitted into the new priorities system of S.P.B. In the meantime the U. S. Office of Education has been requested to collect information on educational needs for S.P.B. use in anticipation of the postwar period of long supply.

S.P.B. Regulation No. 4, issued May 11, authorizes certain classes of aeronautical property to be disposed of at nominal prices to schools and colleges for classroom, research and other non-flight educational activities.

More Go to School by Bus

Despite shortages of vehicles, parts, tires and manpower, 285,000 more children are being taken to school by school bus than were transported in prewar 1941, according to the Office of De-

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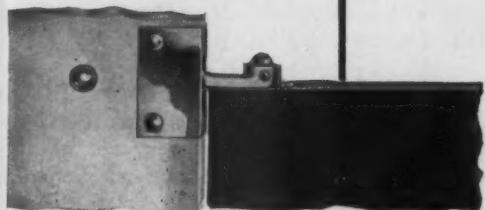
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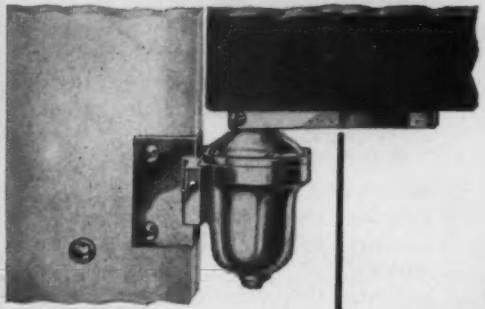
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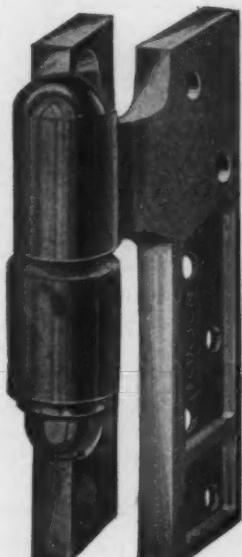
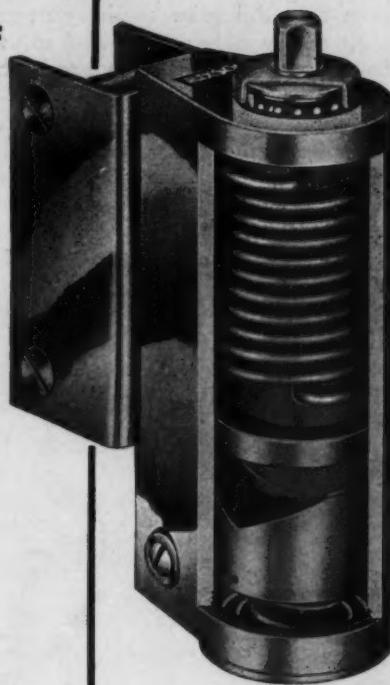
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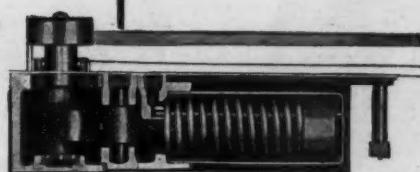
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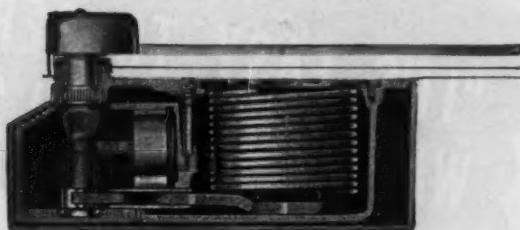
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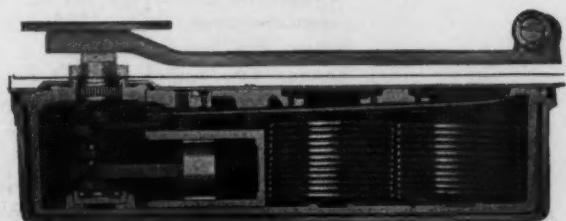
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fense Transportation. Although more children are walking to and from school than they did prior to the war, sufficient service is being provided to avoid hardship and to maintain good school attendance.

By eliminating special services and by reorganizing routes, school administrators have reduced school bus mileage by something like 156,000,000 miles annually. The O.D.T. director commends state chief school officers and local school officials for transportation conservation and declares that they are largely responsible for the continued efficiency of such transportation.

Elementary Classes for Veterans

Special elementary schools and teachers trained for instructing adults will be needed to serve the 4,000,000 servicemen who have not completed elementary school, declares Dr. Paul A. Witty, professor of education at Northwestern University. Existing facilities for adult elementary education are limited.

Doctor Witty, former major who directed the Army program that trains illiterates to read and write in eight weeks, urges state and local authorities to establish these special schools or separate classes in existing schools; the expenses will be cared for chiefly through

financial aid to the veterans under the G.I. Bill.

New methods of motivation, small classes and excellent teachers, such as were used in the Army's program, will greatly aid the efficiency of such programs of adult elementary education, Doctor Witty believes.

For International Education Agency

An international agency of education was approved by 84 per cent of the people polled by the National Opinion Research Center at the University of Denver. In the poll recently completed, American people in every walk of life endorsed "a world agency that would help schools in all countries teach children how to understand the people of other countries."

Asked "if such a world agency were set up, would you be willing to have it examine the schoolbooks in this city (county) to see if they are fair to all nations?" 87 per cent of those polled indicated they were willing.

The poll was requested by the National Education Association and was conducted by sampling opinion in all sections of the country, including different age groups, educational background, occupational groups and political opinion.

Hearings were held on May 15 on H.R. 215 urging the formation of an organization to be known as the International Office of Education. The bill was introduced by Congressman Mundt on April 9 and referred to the committee on foreign affairs.

Approving the idea that an International Office of Education be set up as an autonomous agency under the United Nations Organization, the education committee of the American Association for the United Nations on May 14 urged the United States delegation at San Francisco to make provision for such an agency in the United Nations Charter.

Increasing Subsistence Allowances

A bill to increase the subsistence allowances to veterans receiving education or training under the G.I. Bill of Rights was introduced April 25 by Representative Allen. The subsistence allowance would be changed from \$50 to \$75 a month for a veteran without dependents and from \$75 to \$100 if he has dependents.

Surplus Steel Tool Boxes

Dollars-and-cents ceilings have been established on new steel tool boxes declared surplus by the Army and now being sold for civilian use by the government, O.P.A. announced May 2. The retail ceiling will be \$4 each. The boxes are mechanics' steel tool boxes, painted olive drab, 8½ inches wide, 7¼ inches high, 21 inches long, gable top, with sectional interior top tray.



"I'm darn glad we got started on Mosinee towels before today's towel shortage set in," . . . said the janitor to the superintendent. "The kids don't seem to use as many, 'cause the towels do such a good job of dryin' their hands. I've found I don't have to fill the cabinets so often—and our washrooms aren't all messed with wasted towels."

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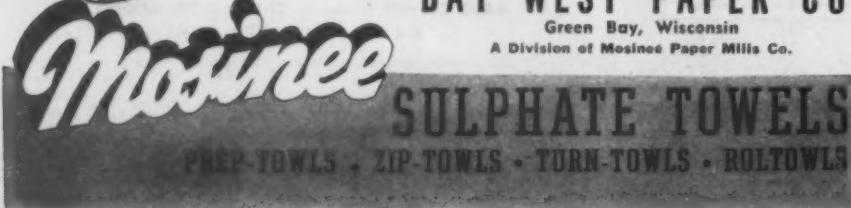
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Class A and B Sheetings for Schools

Specifications for Class A and B sheetings that schools may in emergency cases obtain by priorities assistance are set forth in an amendment to Direction 6 to the textile order M-317, issued April 20. The amendment also simplifies and clarifies the permitted use provisions.

This sheeting is intended primarily as a substitute for duck and twill and may be used for food handlers' garments; cover cloths for laundry presses, mangles and flatwork ironers; folding cots; fire protection, and doctors' uniforms. Applicants should obtain Form WPB-2842 from local W.P.B. offices.

Utilities Order U-5 Revoked

Utilities Order U-5 which prohibited deliveries of listed types of telephone and telegraph equipment except on preference ratings of AA-5 or higher was revoked April 28. Revocation of the order means that types of equipment covered by the order may now be distributed as available, whether or not the orders carry priority rating. Priority ratings will, however, continue to determine precedence in making deliveries.

Types of wire communications formerly controlled by U-5 included exchange and toll telephone central office and PBX switchboards and switching

systems, telephones, telephone and telegraph repeater and carrier systems, telegraph switchboards, teletypewriters, printing telegraph machines and tape perforating machines, and wire intercommunicating sets not using electronic tubes.

New Quotas in Office Supplies

Restrictions on the use of iron, steel, aluminum and zinc in the manufacture of mechanical bindings, loose-leaf metal parts and units were removed by revocation of L-188 April 26. The revocation does not permit the use of these metals, however, if such use is prohibited or limited by other War Production Board orders.

Two other orders, revoked May 4, L-73 and L-227-b, governed the use of iron and steel in certain types of office supplies and restricted (L-227-b) production of wood-cased and other non-mechanical pencils and pen holders, but other controls that may affect the acquisition and use of such materials continue in effect.

L-73 established iron and steel quotas for 11 categories of office supplies: pencil sharpeners, file fasteners, clips and clamps, clipless fastening machines, archboard and clipboard files, list finders, perforators and punches, file signals, inked ribbon spools, file guides or folder tabs, map and thumb tacks. L-227-b limited the manufacture of pencils.

Art Supplies

A new recommendation, R192-45 of the Division of Simplified Practice of the National Bureau of Standards, revising and broadening the scope of "R192-42, crayons, chalks and modeling clays for school use (types, sizes and packaging)," was accepted by the industry and became effective May 1.

It includes colors for drawing crayons, pastels, chalks and modeling clays, and types, sizes, packaging and color for such items as semimoist water colors, dry cake water colors, liquid tempera and powder tempera.

Restricted Photographic Equipment

Interpretation I to L-267, issued April 12, explained that all orders for new restricted photographic equipment and accessories authorized for delivery on WPB-1319 and accepted by manufacturers are to be filled according to the preference rating assigned on the form or, if no rating is indicated, as if they were rated AA-5. This applies to orders for which the purchaser will pay \$500 or less as well as to orders for more than \$500 worth of photographic equipment or accessories.

Plumbing, Heating Order Eased

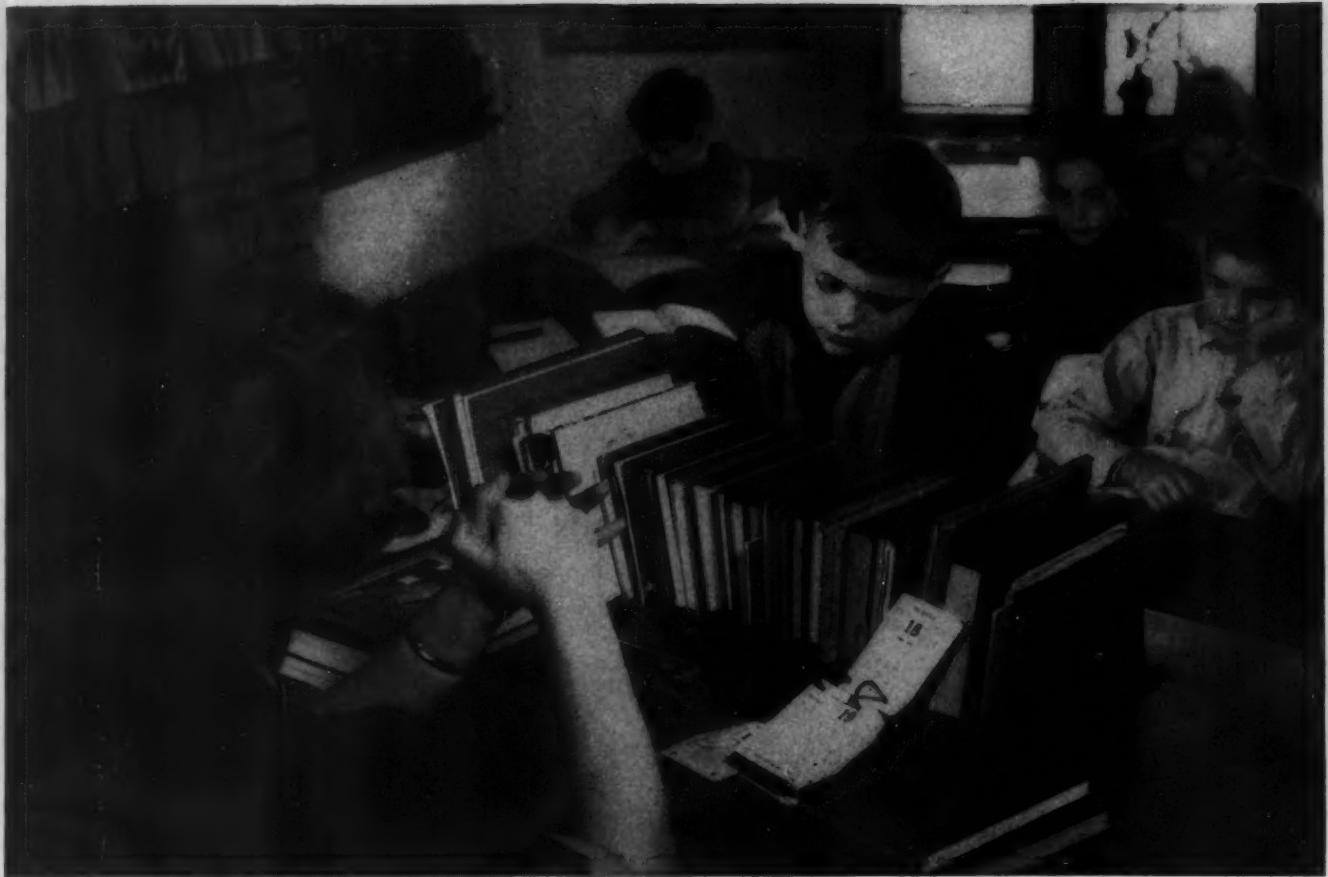
Three schedules of the plumbing and heating order, L-42, were revoked May

The advertisement features a large, stylized script logo for "Sheldon" at the top. Below it is a black and white photograph of a "HIGH SCHOOL CHEMISTRY TABLE". The table has a dark wooden cabinet with multiple drawers and doors, and two sinks with faucets on the left side. The right side of the table has open shelving. The text "FOUR STUDENT FOUR CLASS" is printed below the table. At the bottom left, there is a circular badge with the text "LABORATORY AND VOCATIONAL Equipment". To the right of the badge, there is a block of text about the company's experience and facilities. At the very bottom, the company name "E. H. SHELDON & COMPANY" and location "MUSKEGON, MICHIGAN" are printed.

Superior merit is nationally accorded SHELDON laboratory and vocational installations. Our half-century of experience and unequalled facilities are at your service. Write.

What counts most in the selection of laboratory and vocational equipment is the experience and integrity of your source of supply. There is no substitute for these qualities, and only by insisting upon them can you obtain the benefits of research and standardization; plus the expert, thoroughgoing planning service that integrates every detail of your installation and makes for true utility and economy.

E. H. SHELDON & COMPANY
MUSKEGON, MICHIGAN



Lower cost FLOOR MAINTENANCE!

With today's traffic in your building or school heavier than ever, are you satisfied with the floor maintenance service your present equipment is delivering? If not, then you should check Holt.

Holt floor equipment is exclusively of pre-war quality and will service the average floor or floor covering in less time than most floor machines of equal size.

Holt equipment will do this year in and year out because each machine is *precision-built* and of one quality—TOPS. For years, all Holt research and en-

gineering has been given to Holt floor maintenance equipment because Holt makes no other products. As a result, with a Holt you can expect years of dependable, uninterrupted service, with greater efficiency plus the lowest possible expense for upkeep.

Again, if you have floor maintenance problems—check Holt. This better equipment is now available on priority and we'll be happy to advise on the priorities available for your particular needs. Mail the coupon today for full information. There is no obligation.

NEWARK,
NEW JERSEY

HOLT MANUFACTURING CO. OAKLAND,
CALIFORNIA



SEND THIS COUPON

Please send us full information regarding Holt equipment and your data sheet on floor care and maintenance. We understand there is no obligation for this information.

27

HOLT MFG. CO., 255 12th Street, Oakland 7, California

TRAFFIC CAUSES DUST TO RISE . . .



WESTONE FLOOR TREATMENT CONTROLS DUST

Westone, the chemical floor treatment in liquid form simplifies floor maintenance problems. It continuously improves floor appearance, penetrates rapidly and evenly and actually seems to become part of the floor material itself. Westone controls dust in room atmosphere because the presence of dust in room atmosphere is due not so much to open windows as it is to floor traffic. The problem is to keep the dust from rising. Westone has, in addition to its other properties, a peculiar affinity for dust and when properly used to maintain a floor, the atmosphere will be comparatively free from it because foot traffic will not cause the dust to rise. Westone is very economical to use.

Send for FREE Booklet

WEST DISINFECTING Company

42-16 WEST ST. • LONG ISLAND CITY 1 • N.Y. • DEPT. C



1. They covered low-pressure heating boilers, cast-iron radiators, radiator supply valves and thermostatic, float and boiler return traps. The production of such equipment will be retarded, however, because orders still in effect continue to restrict the use of certain materials needed for its manufacture.

Curtailed Production of Paints

A task committee has been appointed to study the existing situation on essential civilian paint production, according to an announcement by W.P.B. Increased shortages of resin, drying oils and lead are responsible for curtailed production of paints for essential civilian requirements. It is estimated that the production of paints for civilian needs in the second quarter of 1945 will be approximately 55 per cent of the output of the corresponding quarter last year. The shortage will probably not be felt immediately owing to relatively normal inventories in the hands of dealers and distributors.

ADMINISTRATION

More Funds for Florida Schools

Florida schools are to benefit jointly with the state old age assistance program from a tax increase on beer and wine to go into effect July 1. The beer tax was boosted from seven eighths of a cent a bottle to 3 cents and is expected to yield \$6,500,000 additional revenue annually. The first \$4,200,000 will be set aside for old age assistance, the remainder to go to the schools.

Trouble at Y.M.C.A. College

Charging that the board of directors of the Central Y.M.C.A. College in Chicago attempted to tamper with the academic freedom of the staff and to establish racial barriers among the student body, President Edward J. Sparling and two thirds of the faculty have resigned. The action was in reality an arbitrary ouster of Doctor Sparling. Walter D. Gilliland became acting president April 16.

By a vote of 448 to 2, students of the college supported the faculty in its action in separating from the college and its decision to merge with a new college to be opened in Chicago in the fall, to be known as either the Thomas Jefferson or the Roosevelt College.

The services of George A. Works, emeritus professor at the University of Chicago, were obtained by the Y.M.C.A. for consultation and educational leaders in Chicago were invited to serve on an advisory committee to investigate the policies and activities of the college. Doctor Works and the committee, following a study of the school, recom-



Many are the advantages that result from a well equipped and properly installed school plumbing system. Such a system protects the health of the students in your care... helps teach lasting habits of cleanliness... eliminates unnecessary maintenance and repair expense.

Whatever your plans may be—replacements or additions to your present school or a completely new "school of tomorrow"—you'll want the extra dura-

bility and convenience Crane plumbing will give you. In the complete Crane line you'll find equipment for every requirement of the plumbing system of your school... equipment whose high quality and expert workmanship assure long life—satisfactory service.

For complete information on Crane plumbing for your school, consult your plumbing contractor or call the nearest Crane Branch.



CRANE

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVE., CHICAGO 5

VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS

mended a separation from the Y.M.C.A. because of a conflict between the purposes of higher formal education and the Y.M.C.A. policies.

SUMMER COURSES

Summer Courses and Workshops

A special intensive course, "Seminar in Administration: School Buildings," will be given at the University of Washington from July 16 to 20.

Four workshops, served by the Bureau for Intercultural Education as educational

consultant, for helping teachers in service to meet their immediate problems will be held as follows: School of Education, Stanford University, June 21 to August 2; Teachers College, Columbia University, July 2 to August 10; Goddard College, Plainfield, Vt., July 5 to August 16; College of Education, University of Minnesota, July 30 to August 31.

Eight campus workshops will be held at the University of Kentucky College of Education during the summer quarter, which begins June 11. The subjects will be food preservation, curriculum and evaluation of home economics, curricu-

lum study, supervision (helping teachers), school and community (Sloan experiment in applied economics), child development and human relationships, resource use education, counseling and guidance.

The third annual institute on visual education for teachers, administrators and supervisors will be held at the University of Wisconsin and under its auspices from July 16 to 20. Its purpose is to clarify and further understanding of the use of the teaching film in city and rural schools.

MISCELLANEOUS

For "Intermediate" Teachers

A 500 page guide to the Cincinnati instructional program for grades 4, 5 and 6 is recently off the press. Teachers played an important part in the production of this "Intermediate Manual" and it is said to represent an important milestone in curriculum development.

Superintendent's Book Shelf

FUNDAMENTALS OF PHYSICS AND THEIR APPLICATIONS IN MODERN LIFE. By Bower C. Dees. The New Home Library. Philadelphia: The Blakiston Company.

LITERARY STUDY AND THE SCHOLARLY PROFESSION. By Hardin Craig. Seattle: University of Washington Press.

GUIDING GROWTH IN CHRISTIAN SOCIAL LIVING. By Sister Mary Joan, O.P., and Sister Mary Nona, O.P. Washington, D. C.: The Catholic University of America Press.

SCHOOL AND COMMUNITY. By Edward G. Olsen. New York: Prentice-Hall, Inc.

SCIENCE YEAR BOOK OF 1945. Edited by John D. Ratcliff. New York: Doubleday, Doran and Company, Inc.

A RISING WIND. By Walter White. New York: Doubleday, Doran and Company, Inc. **FEDERAL-STATE RELATIONS IN EDUCATION.** Problems and Policies Commission of the American Council on Education and Educational Policies Commission of the National Education Association. Washington, D. C. 25 cents.

EDUCATIONAL OPPORTUNITIES IN THE PROVIDENCE PUBLIC SCHOOLS. Providence, R. I.: Department of Public Schools. **THE LIBRARIAN AND THE TEACHER OF HOME ECONOMICS.** By Frances Henne and Margaret Pritchard. Chicago: American Library Association.

TEXTS OF MAJOR EDUCATIONAL LAWS ENACTED BY EIGHTY-FOURTH INDIANA GENERAL ASSEMBLY, 1945. Indianapolis 9: Research Service, Indiana State Teachers Association.

LEGISLATIVE DIGEST SERIES, 1945. Indianapolis 9: Research Service, Indiana State Teachers Association.

WORK-BOOK IN EDUCATIONAL MEASUREMENTS AND EVALUATION. By Harry A. Greene and John R. Crawford. New York: Longmans, Green and Company.

THE AUTHORITARIAN ATTEMPT TO CAPTURE EDUCATION. Papers From the 2nd Conference on the Scientific Spirit and Democratic Faith. New York: King's Crown Press. 1945.



"Plan now for the increased demand for MONROE TRAINING"

LOOK AHEAD to the day the veterans return

It is estimated that the G. I. Bill of Rights is going to increase school enrollments by millions; and that hundreds of thousands of these returned veterans will want business training—that includes office machine skill, and specifically MONROE OPERATION.

Right now we are helping schools to plan ahead in three ways. (1) Recommending the proper machine equipment for your future needs. (2) Helping you plan courses, and discuss and recommend text books. (3) Studying the employment area you serve, to see if you can get equipment now.

Call on your Monroe representative or write our Educational Department—be ready to meet the demand for Monroe-trained students.

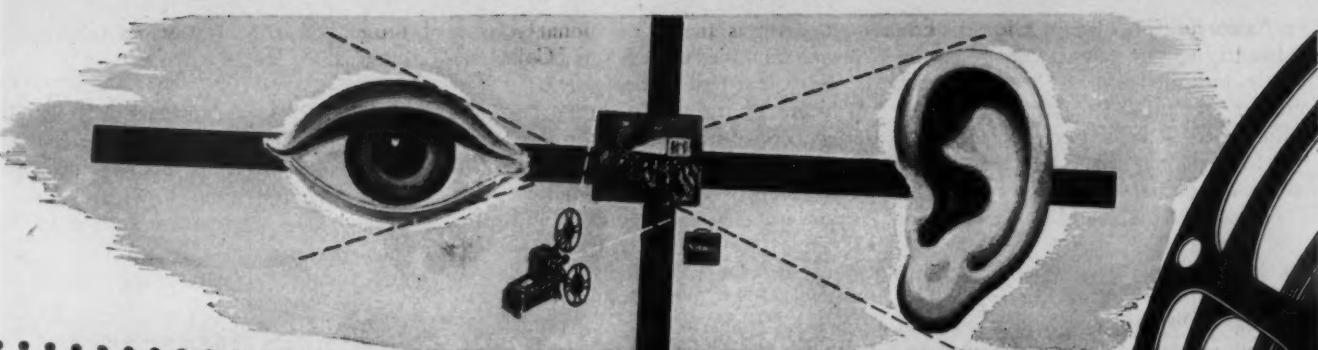
Office Practice Course—30-lesson course adapted to Monroe Educator—50¢ including Teacher's Manual.

School Manual of Instruction—in 2 parts—elementary and advanced. \$1.50 including answers.

The Monroe Educator is a regular Monroe Adding Calculator for schools only . . . let us explain its availability under present conditions.



MONROE CALCULATING MACHINE COMPANY, INC. Educational Department
Orange, New Jersey



Increasing Fact Retention Through Eye AND Ear!

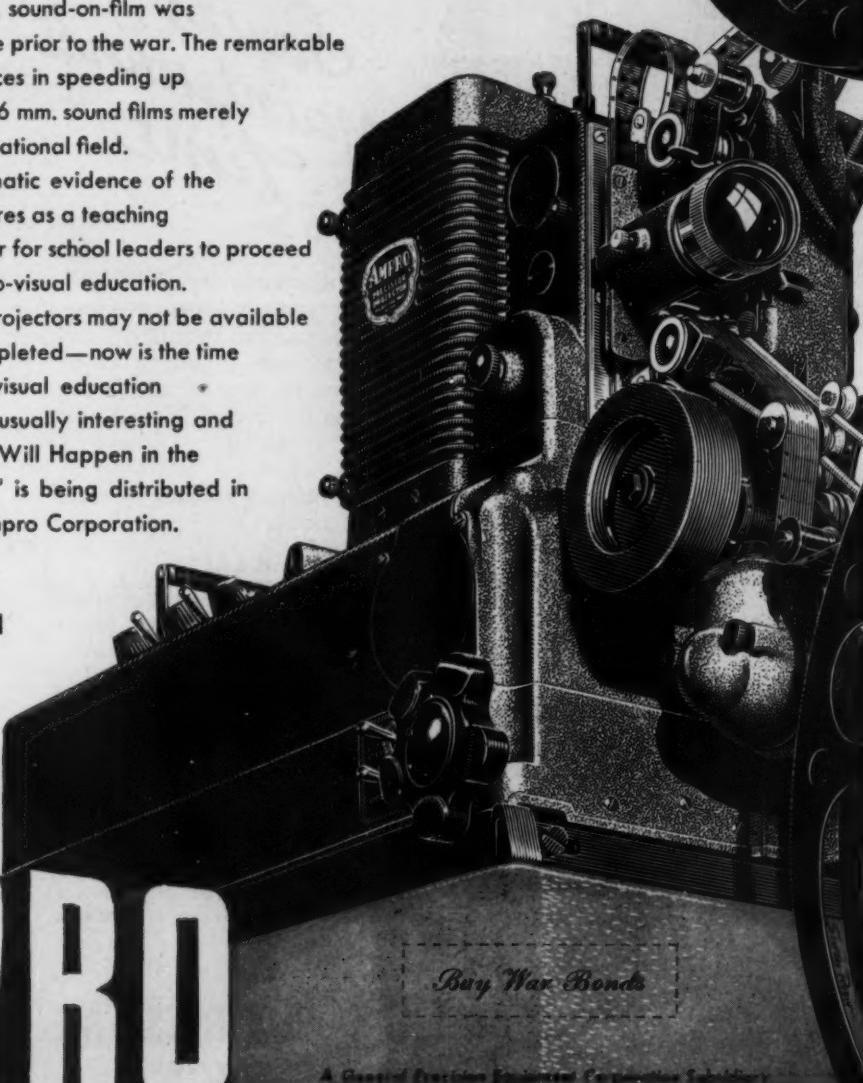
WITH THE AID OF 16 mm. SOUND FILMS

The addition of the sound track definitely increases the retention of the facts and ideas presented to students by 16 mm. motion pictures. Numerous studies and tests had so widely established this truth among educators that the adoption by schools of 16 mm. sound-on-film was proceeding at an accelerated pace prior to the war. The remarkable experience of the U. S. armed forces in speeding up training through the liberal use of 16 mm. sound films merely confirmed the judgment of the educational field.

Now the whole world has dramatic evidence of the effectiveness of sound motion pictures as a teaching aid. Because of this it will be easier for school leaders to proceed with expanded programs of audio-visual education.

Although Ampro 16 mm. sound projectors may not be available to you until our war efforts are completed—now is the time to lay the groundwork for your visual education program. In this connection, an unusually interesting and informative story entitled: "What Will Happen in the Movies the Day War is Over . . ." is being distributed in attractive booklet form by the Ampro Corporation. Write today for your FREE copy.

AMPRO CORPORATION
Precision Ciné Equipment
CHICAGO 16, ILLINOIS



'Fortune' Poll on Higher Education

How the public rates a college education is indicated in a *Fortune* survey conducted by Elmo Roper and published in the April issue of that magazine.

Eighty-one per cent of those interviewed want their sons to go to college; 73 per cent, their daughters. The majority believes that many young people capable of going through college don't attend because they can't afford to. All groups are in substantial agreement with the idea of state governments and private individuals providing scholarship funds for such students but the national government, in the rôle of collegiate angel, is viewed with increasing alarm

as the educational scale of those interviewed mounts. College graduates, particularly, fear federal control.

Vocational training is the purpose of a college education, most of those interviewed believe. Second choice is the ability to get along with people.

The public apparently is willing to let college administration extend its services in any direction desired. Academic freedom is upheld in the poll.

College graduates were asked to rate the things they liked best in their own college experiences. Class discussions came first, books second, informal discussions with fellow students third and personal contacts with professors and

counselors fourth. Clubs and fraternities came last.

N.E.A. Report on Chicago Schools

The N.E.A. 70 page report on its six months' investigation of the Chicago schools demands that Governor Green or the state legislature undertake a sweeping probe of charges. These include financial irregularities, "undemocratic and even fascistic tactics," spying, intimidation of teachers, nepotism, interference with teaching ethics, questionable textbook practices, a one-man board and domination of teacher organizations.

The investigating committee questions Supt. William H. Johnson's qualifications for his job. It suggests that the need for changes in the basic school law and the distribution of expenditures for educational and noneducational purposes and other questions of management be investigated.

Following the release of the report, members of the Illinois senate education committee expressed concern over the charges and indicated they would press for a legislative inquiry.

The printed report is expected to be off the presses June 1.

PUBLICATIONS

Mexico's Role in International Intellectual Cooperation. Proceedings of the conference held in Albuquerque, Feb. 24-25, 1944, under the sponsorship of the University of Texas and the University of New Mexico with chapters by Alfonso Caso, Francisco Villagrán Prado, Pablo Martínez del Río, Rodulfo Brito Foucher and Jaime Torres Bodet. Albuquerque, N. M.: The University of New Mexico Press. 65 cents.

The Rockefeller Foundation: A Review for 1944. By Raymond Fosdick. Complete statements for the year by the secretary, the treasurer and the directors of the various fields of work of the foundation. New York City: Rockefeller Foundation, 49 West Forty-Ninth Street. No charge.

School Lunches—Quantity Recipes Using Evaporated Milk. A booklet which will aid in the planning and preparation of adequate school lunches, containing a lunch plan and recipes. Prepared in cooperation with the Kansas State Board of Health. Chicago 1: Evaporated Milk Association, 307 North Michigan Avenue. No charge.

Proposed Plan for Physical Fitness and Recreation. By Edward Parker. An outline of a plan for a physical fitness and recreational program for the people of Saskatchewan. Regina, Sask.: Department of Public Health.

The Demon Judges, Holiday for Pi-Té, The Well Keeper's Toll. By Virginia Lee. Three playlets of Chinese life suitable for school production, the first for high school pupils, the last two for elementary groups. New York City 19: United China Relief, 1790 Broadway. A small charge.

A Basic Vocabulary of Elementary School Children. By Henry D. Rinsland. A scientifically assembled list of the 14,571 words having a frequency of three or more in the writing vocabularies of elementary grade children, based on a survey of schools in all the varied geographical and sociological situations. New York City: The Macmillan Company.

Should I Start My Own Business? A 44 page booklet for persons who are considering venturing into business for themselves, especially helpful to returned veterans. Urbana, Ill.: Bureau of Economic and Business Research, University of Illinois, 205 Commerce Building. No charge.

BRITEN - ALL

For ALL Floors

Saves Maintenance Time

It's amazing the speedy way BRITEN-ALL makes dirt vanish—from all types of floors and painted or varnished surfaces. And less time taken to clean floors means more time available for other maintenance duties. No wonder BRITEN-ALL is replacing time and money-wasting cleaning methods in hundreds of America's schools. One trial will convince you.

FAST and SAFE

BRITEN-ALL is a scientifically prepared liquid cleaning compound. Cleans floors quicker and cleaner. Absolutely SAFE. Contains no grit or acid—nothing to injure the finest of floors. More economical, too, because highly concentrated—more gallons of more efficient cleaning solution per ounce. Try it.

Consult Us — If you have floor cleaning problems . . . if your floor cleaning expense is too high—in maintenance time or supplies—let Vestal analyze your problem. Perhaps we can suggest a better way.

VESTAL CHEMICAL LABORATORIES, Inc.

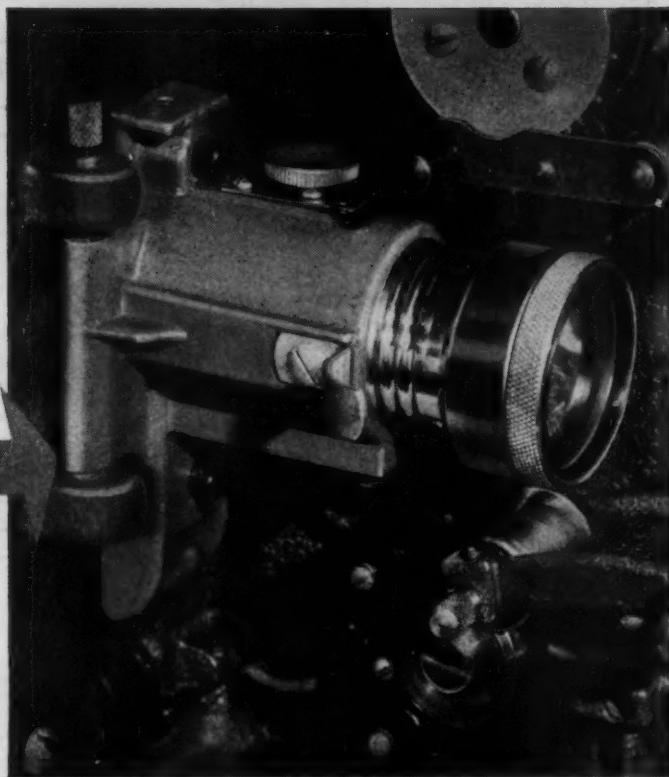
ST. LOUIS

NEW YORK

You can clean this Projector Aperture in a few seconds

because the new RCA gate is removable

Dust and dirt at the projector aperture obscure the screen image and cause increased film wear. The completely removable RCA gate makes instant cleaning possible. Note the four easy steps shown below.



ONE-HAND REMOVAL

Just lift the gate and slip it out for cleaning. When you replace the gate, the pilot-pin construction assures correct alignment, and the initial focus has not been disturbed.



CLEAN THE GATE

With the gate in your hand, it is easy to clean the film-pressure shoes quickly. Dust on the gate can mar the projected picture.



WIPE THE PLATE

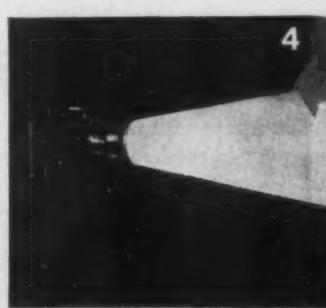
Just wipe, and the aperture plate is cleaned. A clean aperture means longer film life. A dirty aperture may cause wear.



4

READY TO GO

The gate and aperture cleaned in a few seconds, you are ready to go with clear, brilliant projection. The gate is sturdy and strong, with positive optical alignment.



Other features: The new RCA 16mm Sound Film Projector will include other important advances in projector design, such as even-tension take-up; coated lenses; simplified film path for easy threading; amplifier with inverse feedback for true sound; rewind without changing reels; standard tubes and lamps; sound stabilizer to keep sound on pitch; aero-dynamic cooling to prevent hot spots; lower film-loop, adjustable while in operation; theatrical framing.

Availability: These new RCA projectors will be available soon. Investigate the new RCA projector before you purchase. For detailed information on the new RCA 16mm Sound Film Projector, send for descriptive booklet. Write: Educational Department 43-28B, Radio Corporation of America, RCA Victor Division, Camden, N. J.



Buy War Bonds

43-6136-28

RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION - CAMDEN, N. J.

LEADS THE WAY... In Radio... Television... Tubes... Phonographs... Records... Electronics

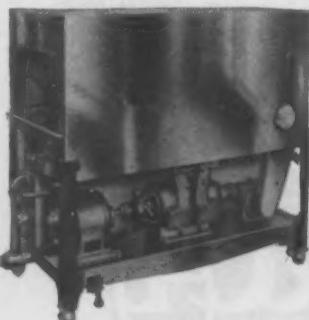
**MR. BROWN SAYS, "WE MIGHT AS WELL
PUT IT UP TO STAY"**



"Until we can get a Colt Autosan, we'll always be looking for dishwashers. I'm tired of doing without that Autosan Dish-washing Machine I should have ordered before the war - people are tired of delays - the help is tired of making excuses. Some day - when I get an Autosan - there'll be plenty of sparkling tableware, even during rush hour. I'm writing right now for an experienced Colt representative to call and help me plan a modern dishwashing department - with an Autosan!"

- ★ Autosan compactness meets every kitchen space problem. Autosan capacity keeps dish traffic moving - assures prompt service!
- ★ Autosan's thorough "cloudburst" action hurries dishes back into use in minutes - avoids "peak load" delay.
- ★ Colt engineering has made Autosan easy to operate - dependable for years of service - easy to clean. Scrap trays lift out in a jiffy. Spray parts are removable without tools.
- ★ Begin planning now. Write and tell us when you would like one of our experienced representatives to call.

Colt Autosan Models now available subject to WPB approval.



MODEL R-3W AUTOSAN

Washes, rinses and re-rinses up to 5000 dishes per hour. Two tanks - 55 gal. total capacity. Powerful pump delivers "cloudburst" action through spray tubes above and below the moving conveyor. High capacity is combined with compact size - 60" long, between table connections, 30" wide at table height, and 57" high.

COLT AUTOSAN

DISH, GLASS AND SILVER WASHING MACHINES

Colt's Patent Fire Arms Mfg. Co. - Autosan Division, Hartford, Conn.

Suggested School Health Policies. Second edition, revised. Prepared by the national committee on school health policies of the National Conference for Cooperation in Health Education. A guide to improving the health of children in schools with information concerning school food service and the school health council added. Available in the fall. New York City 27: Charles C. Wilson, M.D., chairman, National Committee on School Health Policies, Teachers College, Columbia University.

Matching Men and Farms. By Franklin R. Zeran. A guidance bulletin for rural boys and girls. Washington, D. C.: Superintendent of Documents. 10 cents.

Summer Recreation: A Report of Community Programs. A report based on information from the field reaching the Federal Security Agency through the division of recreation suggesting the scope of interest and activity in summer recreation, outlining new trends and summing up the experience of 1944 as an incentive to 1945, with conclusions drawn from a true cross section of the country. Washington, D. C.: Recreation Division, Office of Community War Services, Federal Security Agency.

NAMES IN NEWS

Superintendents

Dr. Henry H. Hill has resigned as superintendent of Pittsburgh public schools to accept the presidency of George Peabody College for Teachers at Nashville, Tenn.

C. C. Linnemann, principal of the high school at East Durham, N. C., has been elected superintendent of schools at LaFayette, Ga. He will succeed **C. W. Peacock** who has resigned after sixteen years as superintendent.

Theo J. Norby has resigned as superintendent of public schools at Ashland, Ore., to enter the California school field.

Arthur E. Chatterton, assistant superintendent of schools at Vernon, Conn., has been appointed superintendent, succeeding **Philip M. Howe** who is retiring.

C. L. Zink, principal of Cunningham Rural High School, Cunningham, Kan., has accepted the superintendency of the schools at Attica, Kan. He will assume his new position August 1.

Walden S. Cofran will succeed **Clyde P. Wells** as superintendent of schools at Batavia, N. Y., at the end of the school term.

V. W. Miller, superintendent of schools at Dayton, Tex., for the last nine years, has been elected superintendent of schools at Pasadena, Tex. **L. E. Gilbert**, superintendent of the Hudson Consolidated Schools at Hudson, Tex., will succeed Mr. Miller at Dayton.

Principals

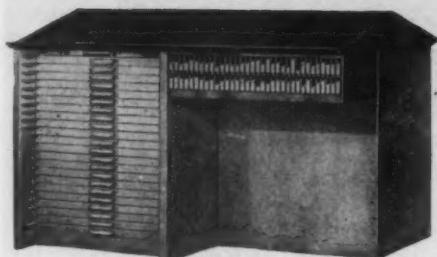
Henry E. Gaeddert, head of the social science department of Chanute Senior High School, Chanute, Kan., has been elected principal of the junior high school at Chanute.

Elwyn G. Campbell is retiring as principal of Roosevelt Junior High School,

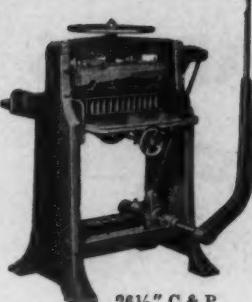
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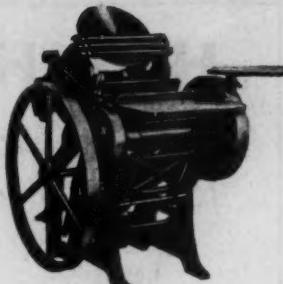
No. 12013-D American Standard School Type Cabinet



26 1/2" C & P Hand Lever Paper Cutter



EHFS Boston Heavy Duty Stapler



10x15 New Series C & P Platen Press

NOW *Everything*

for the SCHOOL

PRINTING

DEPARTMENT

School executives who have been planning to install a printing and graphic arts department . . . are assured of complete service and sound, practical help from ATF.

ATF Complete Service means more than supplying needed equipment . . . it also includes expert advice on layout and operation of a school printing department. ATF's qualifications are derived from nearly half a century of experience installing hundreds of commercial plants and school printing departments in thousands of Junior and Senior High Schools, Vocational Schools and Colleges.

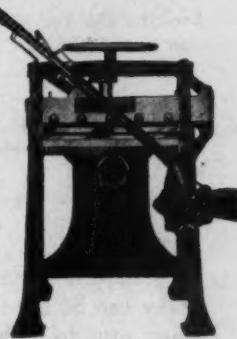
This broad background of experience is freely available to you . . . in addition to helpful literature on important phases of school printing and graphic arts departments, such as:

*Booklets: "Graphic Arts, the Foundation of a Liberal Education"
"Facts About the Printing Industry for Schools"
"Graphic Arts Projects"*

Also available is a series of illustrated folders with suggested floor plans and complete lists of needed equipment for school printing departments of varying capacities. Send for your free copies today.

AMERICAN TYPE FOUNDERS

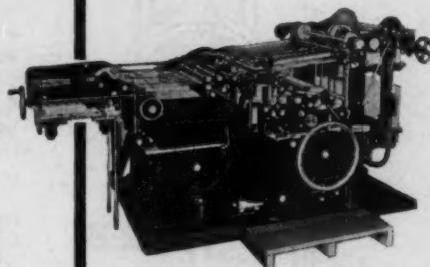
Education Department 200 Elmora Avenue, Elizabeth B, New Jersey



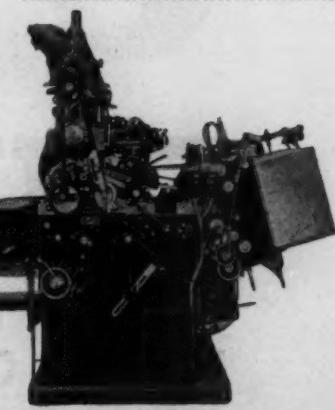
26 1/2" Challenge Hand Lever Paper Cutter



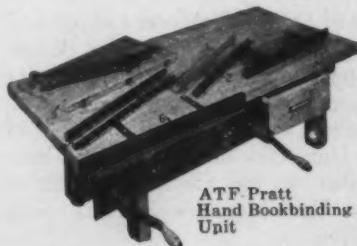
De Luxe Silk Screen Unit



Style C Kelly Automatic Cylinder Press



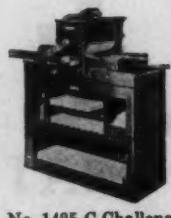
ATF Chief 22 Offset Press



ATF Pratt Hand Bookbinding Unit



No. 2 Vandercook Proof Press



No. 1425-C Challenge Proof Press

HOTCHKISS STAPLERS

Used in Classrooms
for Fifty Years



Look for the Red H
on every box of
Staples

Teachers rely on the un-failing service of Hotchkiss Staplers to keep related papers together.



There is a Hotchkiss stapler for every paper fastening need. Many can be used as tackers to fasten papers, drawings, pictures, maps, etc., to walls and bulletin boards. Genuine Hotchkiss chisel-pointed staples penetrate easier, cause less fatigue.

Insist on genuine Hotchkiss products. Ask your local Stationer or write direct to us.

Hotchkiss

SCHOOL SUPPLY DIVISION
NORWALK, CONNECTICUT



These Locks Have Made a Name for Themselves!

For more than two decades Dudley School Locks have been carving out a name for themselves wherever lockers protect pupils' property. Executives write us that Dudley locks are the most successful that they have ever used . . . that they reduce the repair bill on lockers to practically nil . . . that they are the only lock to resist picking or forcing.

Dudley locks are entirely different because they are built on basic patents and developed from broad experience and intimate knowledge of the field. Besides those pictured, we furnish both built-in and master-keyed combinations. AA2MRO rating. For early deliveries, order next term's locks now.

DUDLEY

LOCK CORPORATION

DEPT. 610, 570 W. MONROE STREET, CHICAGO 6, ILLINOIS

New Bedford, Mass. Mr. Campbell has been principal of the school for eighteen years.

Glenn E. Bretsch, formerly principal of Central School, Andover, N. Y., has accepted the position of supervising principal of Addison High School, Addison, N. Y., beginning September 1.

Eleanor Fitzpatrick has resigned as principal of Lancaster Country Day School, Lancaster, Pa., to accept a position as head mistress of Low-Haywood School, Stamford, Conn.

Dr. Samuel N. Levenson, principal of Junior High School No. 40, South Jamaica, N. Y., for more than twenty years, has been appointed assistant superintendent.

Arthur E. Wolters, mathematics instructor at Highland Park High School, Highland Park, Ill., has been named principal of the school succeeding Dr. Harold Spears who has resigned.

In the Colleges

Dr. Arthur H. Compton, who has served as dean of the division of physical sciences at the University of Chicago since 1940, has accepted the chancellorship of Washington University in St. Louis.

Dr. Wesley Frost, former ambassador to Paraguay, has joined the University of Denver faculty as an instructor in international economics and international relations. Doctor Frost resigned from the State Department last year, after thirty-five years in the diplomatic corps.

Miscellaneous

George H. Fern, director of vocational education since 1936 for the Michigan State Board in Control of Vocational Education, has resigned to become chief of the training branch of the office of the Secretary of War. Mr. Fern will be in charge of civilian training for 1,200,000 War Department civilian employees, now in 1600 centers around the world.

Deaths

Dr. Warren E. Bow, superintendent of Detroit public schools and president of Wayne University, died May 12 at the age of 53. A lifelong resident of Detroit, Doctor Bow had served the Detroit system for thirty years as teacher and principal in grade and high schools, as dean of Detroit Teachers College and as assistant, first assistant and deputy superintendent of public schools. Doctor Bow succeeded Dr. Frank Cody as superintendent of schools and president of Wayne University in 1942. He had been a member of the editorial consultant staff of The NATION'S SCHOOLS since 1942.



- ★ The durability of Hill-yard Floor Treatments is measured by their Hi-Quality and the fact that for nearly a half a Century they have given lasting satisfaction in the protection of all types of floor surfaces and in economy, time saved and labor costs reduced.
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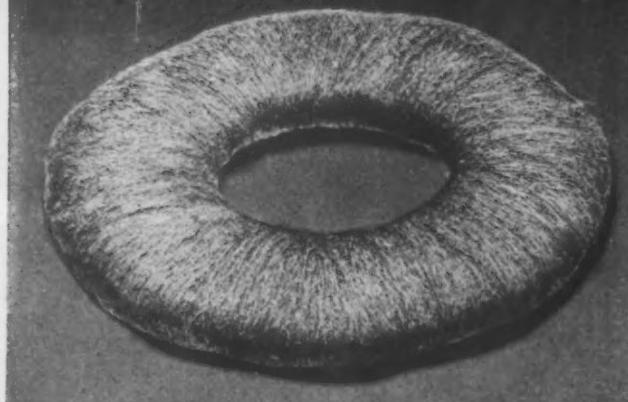
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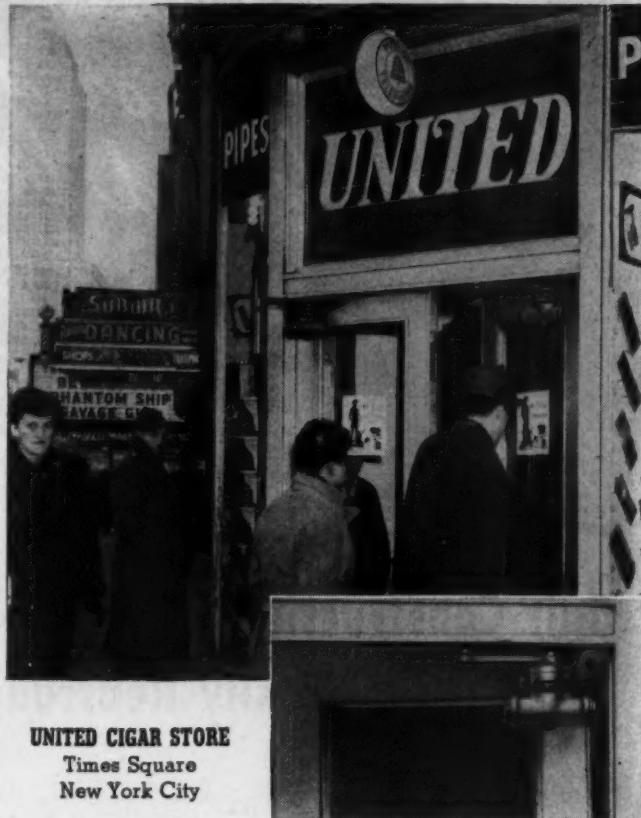


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should be
FLEXIBLE!*

Johns-Manville Announces Unit Construction for Schools—Durable —Attractive—Easily Rearranged

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2. **Acoustical Ceilings . . .** eliminate distracting noise, increase class efficiency.
3. **Resilient Floors . . .** quiet, easy to walk on, easy to clean.

But what if a school is never altered or converted? Even so, these J-M materials are an integral part of the structure and give long-enduring satisfaction in many other ways. For instance, all the constituent parts are durable . . . hard to mar . . . shock-proof . . . easier and more economical to maintain. And their attractiveness inspires pride . . . contributes an atmosphere of cheerfulness and appealing beauty.

Write for further information and details on this important advance in school construction. Address: Johns-Manville, 22 East 40th St., New York 16, N. Y.



This attractive, modern classroom is typical of J-M Unit Construction for Schools. It provides not only flexibility, but quietness and beauty conducive to classroom efficiency. Note the clean-cut, projection-free Transite Walls, the Acoustical Ceiling with fluorescent lighting, the colorful, easy-to-clean Asphalt Tile Floor.



Johns-Manville Unit Construction for Schools

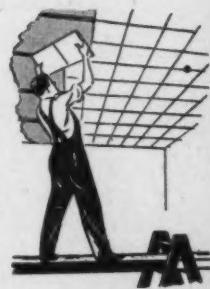
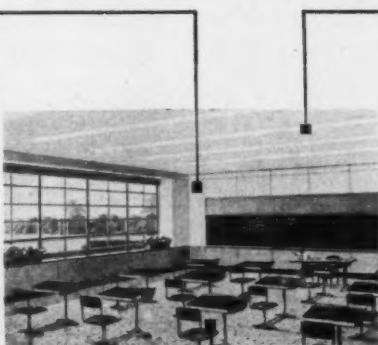
WALLS CEILINGS FLOORS



Here are the three elements combined to form UNIT CONSTRUCTION FOR SCHOOLS:



Movable Walls—The key-stone of flexibility in Unit Construction is the J-M Transite Wall. It can be disassembled and relocated as educational needs require. One-unit rooms, for instance, can be speedily converted into two-unit rooms, or vice versa. Made of fireproof asbestos-cement, practically indestructible materials, the movable panels are used not only to form the rigid, double-faced partitions 4" in thickness, but also to finish the interior of the outside walls as well.



Acoustical Ceilings—Important factor in helping to overcome the handicap of distracting noise, Johns-Manville Acoustical Ceilings are beneficial both to teacher and student alike. They give the desired degree of quiet for effective teaching, eliminate frequent causes of nervousness, and are proved aids to concentration. An exclusive J-M patented construction system permits interchangeability of flush-type fluorescent lighting and acoustical ceiling units.



Colorful, Resilient Floors—J-M Asphalt Tile Flooring completes the Unit Construction System. Made of asbestos and asphalt, the units will withstand the kind of hard wear and abuse that must be expected in any school building. Not only are they durable, J-M Asphalt Tile

Floors are pleasantly comfortable and quiet underfoot, thereby reducing the disturbing effects of noisy footsteps in classrooms, corridors, gymnasiums, etc. Individual units permit easy alterations or repairs. Made in a wide variety of plain and marbleized colors.

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are used in **1,200**
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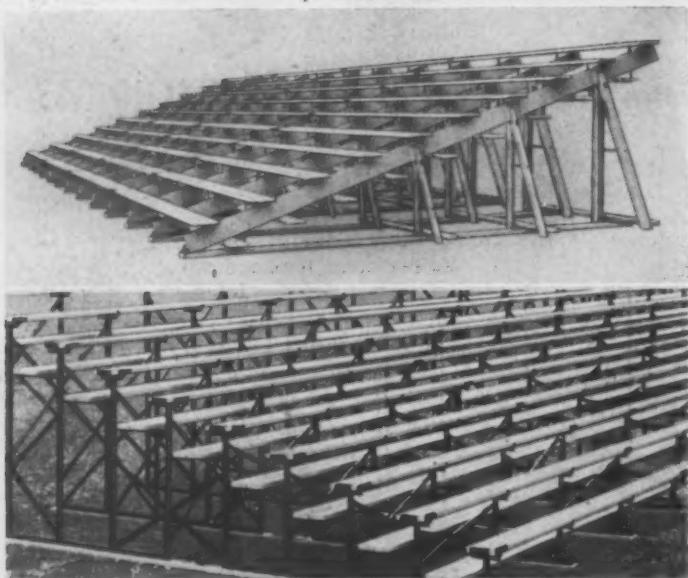
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A New Manual for Users has just been published. Upon request a copy will be sent without charge to users or others interested.

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D. Kenneth Sargent, Architect

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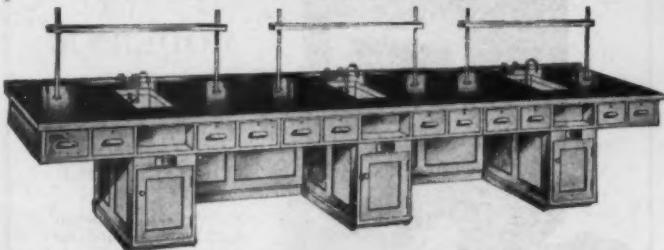
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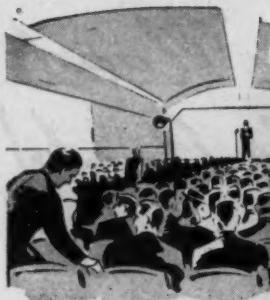
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Your local monument dealer is an excellent source of help in the work of making drawings, and will gladly incorporate Metalcraft design for a quotation, to you. Or you may write direct, sending rough sketch for our suggestions.



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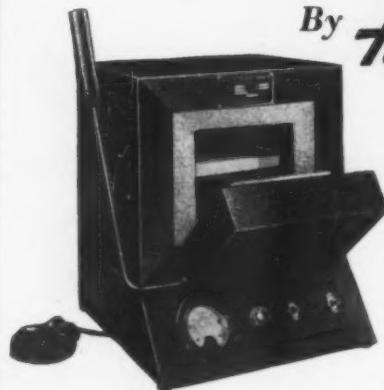
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For consultation, free floor survey, or literature on *Finnell Supplies and Maintenance Machines*, phone or write nearest *Finnell* branch or *Finnell System, Inc.*, 206 East Street, Elkhart, Indiana.



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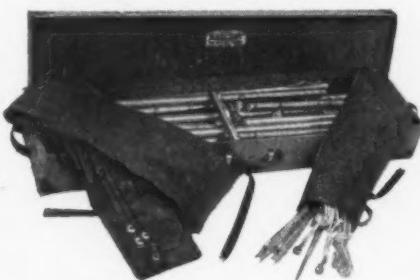
The NATION'S SCHOOLS

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Can Be Set Up in Few Minutes

Radiant has just announced a collapsible, portable screen, "Fold-Pak," which can be folded up into a light-weight carrying case in a few minutes and can be easily transported in a car. The steel frame, which is light-weight and rustproof and has springs to hold the screen smooth and flat, is supported on legs that will raise the screen up to 5 feet above the floor or ground. The screen fabric is washable and moisture proof.



Ideal for use on large stages, in auditoriums, large outdoor gatherings, road shows, meeting halls, camps or wherever a large screen is needed, the screen is available in sizes from 7 by 9 feet to 11 by 14 feet. Guy ropes are provided for outdoor use. The screen can also be suspended from above.—**Radiant Manufacturing Corporation, 1184 West Superior Street, Chicago 22.**

• When inquiring, use coupon on p. 99, refer to **NS537**

Mobile Service Station

For Motion Picture Projectors



give dooryard service to owners of Bell & Howell Company's projectors.

Manned by a graduate electrical engineer, this trailer will park on the school grounds and within a few hours the often ill-used movie machines will be put into first-class condition.

The plan is that eventually a mobile B&H authorized service station can visit each school system under contract twice a year. While preventive maintenance is its primary purpose, the trailer's engineer is equipped with

both skill and spare parts to do complete overhauls on any projector ever manufactured by this pioneering firm.

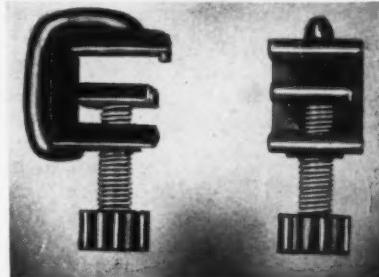
At its first showing in Chicago on May 9, the original model of the projected trailer fleet met with widespread enthusiasm and aroused considerable envy, inasmuch as in a small room at the rear are comfortable living accommodations for the service engineer. The trailer is attached to a station wagon. The Chicago board of education alone could keep one of these trailers in full-time use in repair work, Joseph Dickman declared. With 350 projectors at present, the Chicago schools need another thousand as soon as they are available.—**Bell & Howell Company, 7100 McCormick Road, Chicago 45.**

• When inquiring, use coupon on p. 99, refer to **NS538**

New Plastic Clamp

Is Acid Resistant

School shops and laboratories will like the ruggedness and simplicity of design of the recently developed plastic clamp. The clamp consists of two parts; a stator or stationary base and



a clamping piece adjustable by means of a threaded screw turning knob. Light in weight, the clamp is acid resistant, moisture resistant and alkali resistant and has high impact strength. The manufacturer states that it is a nonconductor of electricity and is ideally suited to all conditions calling for positive mechanism for light applications.—**Commercial Plastics Company, 201 North Wells Street, Chicago.**

• When inquiring, use coupon on p. 99, refer to **NS539**

Recording for Classroom Use

Discusses Military Training

The first of a series of recorded discussions arranged for classroom use presents a discussion of compulsory peace-time military training. Dr. William G. Carr, representing the Educational Policies Commission of the N.E.A., and Leo Pennington of the American Legion discuss the problem on the 16 inch record which plays for thirty minutes at 33-1/3 r.p.m.

The manufacturer is planning regular issuance of educational recordings designed for secondary and college levels. Both 16 inch and 12 inch recordings at speeds of 33-1/3 r.p.m. and 78 r.p.m. are included in present plans. Subjects will be pro and con discussions of timely public

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What's New FOR SCHOOLS

issues, studies in the appreciation of fine arts, foreign language recordings and historical selections reproducing the original historic address.

Other educational recordings currently available are: "Disposal of Surplus War Properties," "Postwar Global Air Transport," "Pan Americanism" and "Return to Manila," a transmission of broadcasts by General MacArthur and President Sergio Osmena.—United States Recording Company, 1121 Vermont Avenue, N.W., Washington, D.C.

- When inquiring, use coupon on p. 99, refer to **NS540**

NEW CATALOGS

Two Booklets on Instrumental Music

Are Written for Parents and Pupils

To stimulate greater appreciation of music among children, C. G. Conn, Ltd., Elkhart, Ind., has published "Music, the Emotional Outlet for Youth," to show parents the values their children can gain from a musical education, and "Fun and Popularity Through Music," to emphasize to youths the opportunities that can be derived from playing a musical instrument.

"Music, the Emotional Outlet for Youth," by pictures and sketches, outlines the qualities of leadership, character and initiative that musical training develops. Also included are pictures of Albert Einstein, Raymond Gram Swing, the late Knute Rockne and other famous men who have music as their hobby.

By playing a musical instrument, pupils can help earn their way through school, attend summer camps and travel to sports events, says the second booklet, "Fun and Popularity Through Music." Pictures and descriptions of pupils who have won contests are given, as well as artists who have used instrument playing as their profession.

Both booklets illustrate the different features of Conn instruments and the tools with which they are made.

- When inquiring, use coupon on p. 99, refer to **NS541**

Guide to Color Selection

Will Be Helpful to Schools

A color guide to help persons without understanding of color technics to specify hues that minimize fatigue and stimulate interest has just been published by the Arco Company, 7301 Bessemer Avenue, Cleveland 4. Entitled "A Practical Guide to the Use of the Optonic Color System," the catalog contains 18 rules on color selection that have been used in more than 250 schools and a number of industrial plants.

The first eight rules specify the use of colors to com-

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Teaching them with Atkins Saws now means faster learning and better work. These fine saws have a "feel" that is natural and keen teeth that hold their edges for long periods. What's more, their ruggedness is an extra asset in the classroom, where green hands are likely to give saws a real work-out.

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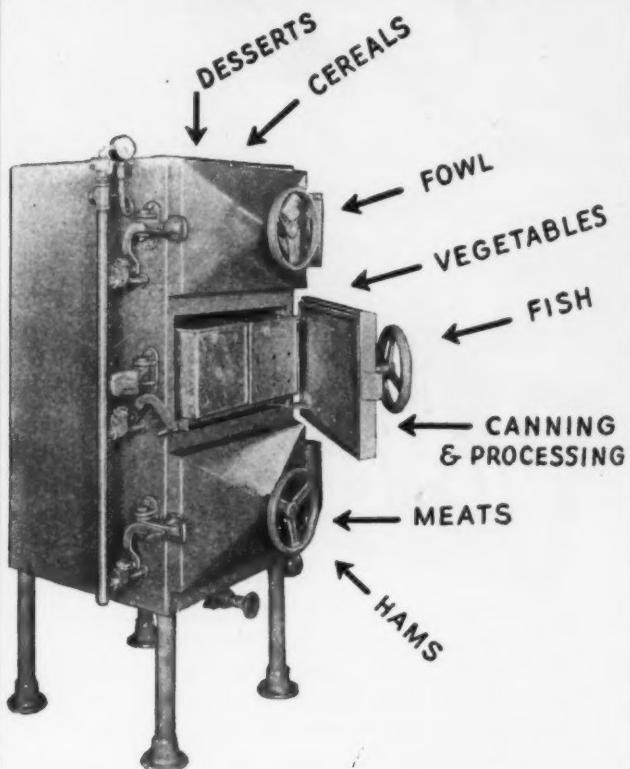
Illustrates in detail the right way of filing and setting saw teeth. 19" x 25", it's suitable for wall mounting. Sent to you free on request.

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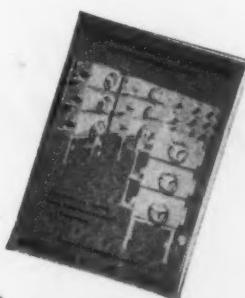
SEE . . . WHAT IT DOES FOR STUDENTS' MEALS!



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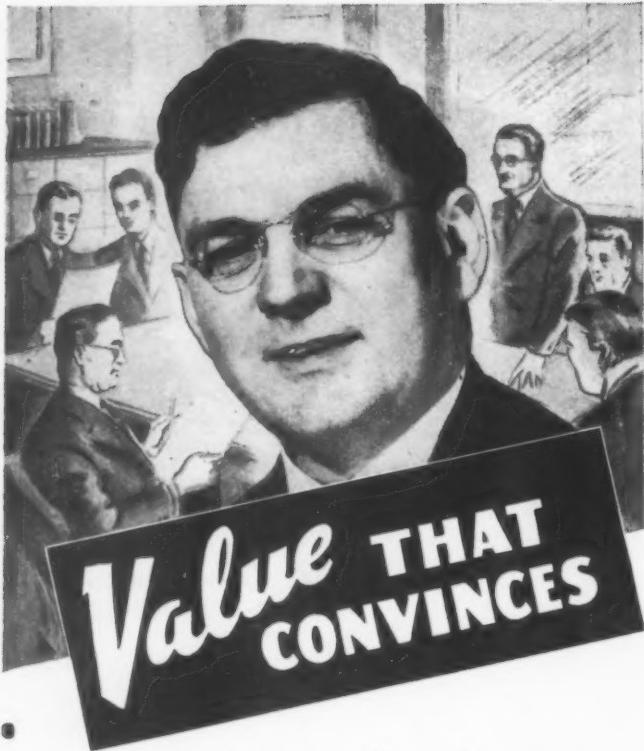
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What's New FOR SCHOOLS

pensate for deficiencies in natural and artificial light. The remaining rules guide the choice of selection of colorful combinations for corridors and cafeterias as well as give suggestions for the selection of shades for work areas.

The Optonic system provides colors which fortify the reflection of the wave lengths in which working light is deficient and soften the wave lengths which are excessive.

- When inquiring, use coupon on p. 99, refer to **NS542**

Handbook on Visual Equipment

Suggests Plans for Its Use in New Schools

To help schoolmen plan for the best possible use of visual equipment, Bell and Howell, Educational Division, 7100 McCormick Road, Chicago 45, has published an architects' handbook complete with detailed diagrams and blueprints to tell designers where to place their equipment. The correct seating arrangement, screen size and type, location of wall sockets and cables, electrical specifications, loud-speaker support are all carefully explained to planners of new school buildings.

The booklet contains a plan for an ideal projection booth showing the correct placement of the observation opening, monitor speaker and master auditorium switch. A wiring diagram of front and rear wall sockets prevents insufficiencies in outlets.

Bell and Howell states that "it is more economical to plan for the proper use of audio-visual equipment during the original construction than to make adjustments later," and the booklet is planned to give all the necessary specifications for the use of visual aids in the modern school building.

- When inquiring, use coupon on p. 99, refer to **NS543**

FILM RELEASES

Seventh War Loan Films

Available From State War Finance Committee

Action at Anguar—16 mm. sound. 24 minutes. The 81st Infantry "Wildcat" Division is shown fighting veteran Jap troops on the island of Anguar in the Pacific. After a month's furious fighting, the "Wildcat" Division relieved the threat to the Army's return to the Philippines. Produced by the Army Ground Forces.

- When inquiring, use coupon on p. 99, refer to **NS544**

Story of a Transport—16 mm. sound. 20 minutes. Records the colorful career of the 24,000 ton transport *Wakefield* and links the ship's past as the peace-time luxury liner, *Manhattan*, with her war service present.

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Consider carefully the manner in which you perpetuate the memories of those who served and sacrificed. Truly fitting memorials and honor roll tablets cannot be produced at this time while bronze must be devoted entirely to war uses. When the Government releases this enduring metal, we shall be ready with a complete new series of designs that will be worthy of association with such General Bronze achievements in casting as the famous statues at Rockefeller Center and the beautiful bronze Baldachino in St. Patrick's Cathedral. These new memorials and honor rolls will reflect our thirty-five years' experience in fine bronze work. Send for our interesting and helpful brochure.

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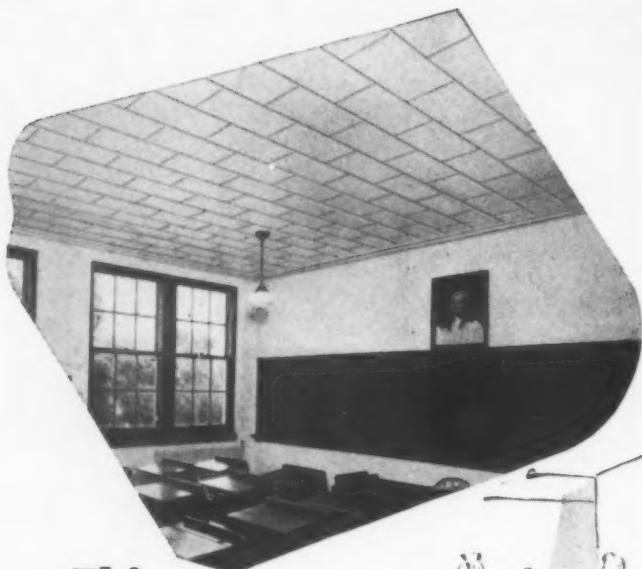
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What's New FOR SCHOOLS

Shown are scenes of the *Wakefield* being bombed at Singapore, burning in the Atlantic and filled with troops bound for Europe. Produced by the Coast Guard.

- When inquiring, use coupon on p. 99, refer to **NS545**

Midnight—16 mm. sound. 8 minutes. Action opens at longitude zero, Greenwich, England, where local midnight and the Navy's official midnight coincide. Then, the Navy is followed around the world, showing all types of combat action, fleet preparation, men fighting, sleeping, working and training. Produced by the Navy.

- When inquiring, use coupon on p. 99, refer to **NS546**

This Could Be America—16 mm. sound. 4 minutes. Bullets and bombs of the Japs are shown hitting at what appear to be airfields in Chicago, Denver and Cincinnati, but an American narrator interrupts by saying that these were not American cities but "they could have been." Produced by the Navy.

- When inquiring, use coupon on p. 99, refer to **NS547**

My Japan—16 mm. sound. 20 minutes. By the use of captured Japanese footage, a Japanese narrator, in a direct challenge to our war effort, rips aside the curtain of our overoptimism and complacency and shows us what confronts us as we draw near Japan. Produced by the Navy.

- When inquiring, use coupon on p. 99, refer to **NS548**

Iwo Jima—16 mm. sound. 4 minutes. A realistic closeup of battle showing the mounting toll of action as we move nearer Japan. The picture was made during the combat fighting on the island. Produced by the Navy.

- When inquiring, use coupon on p. 99, refer to **NS549**

The Voice of Truth—16 mm. sound. 4 minutes. The effect on our men in the Pacific of the voice of Tokyo Rose. The film shows their reaction to this Japanese propaganda. Produced by the Navy.

- When inquiring, use coupon on p. 99, refer to **NS550**

Remember These Faces—16 mm. sound. 18 minutes. color. The film pictures the wounded in the invasion of the Pacific, following them from the front line to the hospital ships, and records the rapid transition from front-line casualties to men safe in the hands of modern medicine. Produced by the Navy.

- When inquiring, use coupon on p. 99, refer to **NS551**

(The above Seventh War Loan films can be obtained from your local War Finance Committee, 16 mm. state chairman or distributor, or the Bureau of Motion Pictures, Office of War Information, Washington 25, D. C.)

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are filling the gap between prewar and post-war Clarin steel furniture. They are strong, comfortable and practical.

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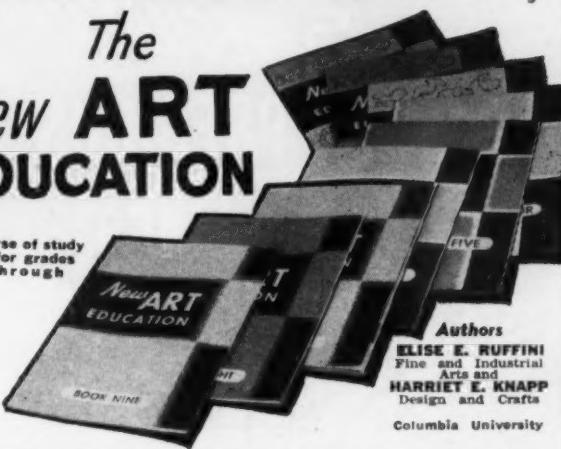
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Here is the dependable information you need to make it easier to prepare and serve meals in your school cafeteria. Includes helpful material on menu planning, food quantities, time of preparation, organization in the kitchen, division of work, and a variety of well-tested, standardized recipes which you can use with confidence in your lunchroom menus.

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KEYED LIST of ADVERTISERS in this issue

KEY		PAGE	KEY		PAGE												
552	American Blower Corporation	65	580	DuPont de Nemours & Co., Inc., E. I.	Facing page 84												
553	American Crayon Company	97	581	Edison General Electric Appliance Co., Inc.	Facing page 57												
554	American Gas Association	2nd cover	582	Electric Hotpack Co., Inc.	88												
555	American Type Founders	81	583	Finnell System, Inc.	89												
556	Ampro Corporation	77	584	Gaylor Brothers	86												
557	Arlington Seating Company	94	585	General Bronze Corporation	95												
558	Armstrong Cork Company	71	586	Hamilton Manufacturing Co.	83												
559	Atkins & Company, E. C.	93	587	Hicks Body Works	16												
560	Bay West Paper Company	70	588	Hillyard Company	83												
561	Bell & Howell Company	55	589	Holden Patent Book Cover Co.	95												
562	Bendix-Westinghouse Automotive Air Brake Co.	89	590	Holmes Projector Company	98												
563	Bogen Company, Inc., David	87	591	Holt Manufacturing Company	73												
564	Celotex Corporation	15	592	Hotchkiss Sales Company	82												
565	Chamberlin Company of America	92	593	Huntington Laboratories, Inc.	66												
566	Cincinnati Metalcrafts, Inc.	88	594	Hynson, Westcott & Dunning, Inc.	84												
567	Clarin Manufacturing Co.	97	595	International Bronze Tablet Company	88												
568	Colt's Patent Fire Arms Mfg. Co.	80	596	International Theatrical & Television Corp.	9												
569	Compton & Company, F. E.	4th cover	597	Jam Handy Organization	68												
570	Conn, Ltd., C. G.	13	598	Johns-Manville	Insert following page 84												
571	Consolidated Laboratories, Inc.	86	599	Johnson Service Company	2												
572	Continental Car-Na-Var Corporation	59	600	Keystone View Company	Facing page 85												
573	Continental Steel Corporation	4	601	Lalance & Grosjean Mfg. Co.	1												
574	Crane Company	75	602	Libbey-Owens-Ford Glass Company	12												
575	Da-Lite Screen Co., Inc.	85	603	McArthur & Sons, Geo.	88												
576	Delta Mfg. Company	Insert following page 66	604	Market Forge Company	93												
577	Devoe & Raynolds Co., Inc.	64	605	Medart Mfg. Company, Fred	97												
578	DeVry Corporation	63	606	Milwaukee Dustless Brush Company	5												
579	Dudley Lock Corporation	82	607	Modine Manufacturing Company	61												
537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554
555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572
573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590
591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608
609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626
627	628	629	630	631	632	633	634	635									

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537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554
555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572
573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590
591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608
609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626
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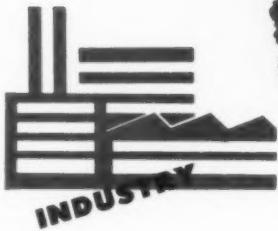


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NATION'S SCHOOLS

VOLUME 35

JANUARY TO JUNE, INCLUSIVE

1945

THE NATION'S SCHOOLS PUBLISHING CO., Inc.
CHICAGO
1945

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INDEX TO VOLUME 35

JANUARY TO JUNE, INCLUSIVE

The various articles are indexed under the author and subject. Abbreviations used in this index are: Ja, January; F, February; Mr, March; Ap, April; My, May; J, June; (Ed.), Editorial; (P.), Portfolio; (Q.A.), Questions and Answers; (S.O.P.), School Opinion Poll.

A ctivities, let's book school talent,

I. A. Barrett J 46

Administration, are exam exemptions

wise (Q.A.) Mr 6

are overflow rooms wise (Q.A.) Ap 8

audit of school accounts (Q.A.) Ap 10

better salaries will help (Q.A.) Ja 8

business methods in administration,

D. C. Rogers Mr 29

combating lure of big wages (Q.A.) J 6

control of recreation (Ed.) F 18

credit for war service (Q.A.) Mr 6

determining pupil loads (Q.A.) Ja 8

disadvantages of area vocational

schools, E. B. Elliott Ap 23

education under fire (Ed.) Ap 17

Florida proposals J 17

for improving Florida schools, E. L.

Morphet My 52

G.I. educational rights (Ed.) Mr 17

great task remaining, N. L.

Engelhardt Mr 28

how can we check tardiness (Q.A.) J 6

let's experiment in administrative

personnel My 29

new emphasis on morale, F. R. North

and E. E. Tompkins J 49

new Iowa school code proposals,

N. D. McCombs Ap 51

new patterns in administration, P. R.

Mort J 24

not officially dismissed (Q.A.) Mr 6

our policy (Ed.) Ja 17

paying for athletic suits (Q.A.) J 6

petting problem (Q.A.) Ap 8

postwar planning leaders (Q.A.) F 6

problem of slow child (Q.A.) Ja 8

redistricting plan works well, L. L.

Chisholm Ap 24

retain married teachers Ja 10

rural school consolidation (Q.A.) Ja 8

study hall period (Q.A.) J 6

teacher professionalism (Q.A.) F 6

teachers' unions (Q.A.) My 8, J 6

time before school opens (Q.A.) Mr 6

undivided school support essential,

A. B. Moehlman Mr 19

veteran in high school (Q.A.) Mr 6

we can help with discipline (Q.A.) Ap 8

we run our schools on democratic

lines, Y. C. Howell Mr 24

weighted formula must go, E. H.

Thorne My 24

what about in-service training for

board members (S.O.P.) Mr 43

what admission basis (Q.A.) Ja 10

what basis for pupil promotion,

W. A. LeBaron J 51

what teacher-pupil ratio (Q.A.) Ap 8

what's new in state support, A. J.

Burke Ja 29, F 41, Mr 46

will guidance counselors supplant

deans, V. Kuhnle My 47

See also Board of Education; Salaries;

School Opinion Poll

Administrators, art of cooperation,

P. C. Johnson F 46

I am second-mile educator, C.

Kardatzke J 31

war-time tenure of superintendents,

A. Thompson J 42

we're not good salesmen, O. A.

Crosby F 31

Adult Education, Army rehabilitates, its blind soldiers, Lt. W. A. Jameson Ap 20

need for parent education (Ed.) Mr 18

world peace through adult education,

E. C. Lindeman Mr 23

Advanced Education, freedom of teaching jeopardized, A. B. Moehlman Ja 19

"gypped!" G.I. Joe must be protected against low-grade colleges,

J. B. Edmonson F 25

racial discrimination (Ed.) My 17

Allison, Helen, Breakfast at school Mr 57

American Association of School Administrators, A.A.S.A. Conferences, Ltd. Mr 28

great task remaining, N. L.

Engelhardt Mr 28

special committee reports Ja 48

Anderson, Homer W., National service

for youth F 20

Appraisal, improving Boston schools

(Ed.) Ja 18

Architecture: See Designs and Plans

Area Schools, disadvantages of area vocational schools, E. B. Elliott Ap 23

Armstrong, David T., Pupils' objections

to school Mr 51

Athletics: See Physical Education

Audio-Visual Education, Canada lags in

use of films, M. P. Toombs J 53

demonstrates use of radio in school J 54

how British schools use radio My 54

how children read papers, H. R. Long My 20

midwest pioneers in radio education,

E. W. Crawford F 54

pictures help history, D. C. Knowlton My 53

radio in teaching, G. Jennings Mr 31

seed takes root, D. Schneider Ja 52

start with what you have, T. A.

Fitzsimmons Ap 52

still pictures tell story, C. Ullin Mr 52

they like "educational" films, C. A.

Root F 52

use public address system to teach

broadcasting, E. Trobaugh Ap 52

we learn about South America, O. E.

Sams Jr. Ja 50

See also Film Releases; School Films

Bacon, Francis L., Questions we must

answer Ja 24

Baker, Frank E., Adjusting teachers'

sights to international horizon Mr 47

Baker, Pearl C., How to plan an exhibit Ap 56

Bands: See Music

Barnard, Eunice Fuller (Ed.) Ja 18

Barrett, Lawrence A., Let's book school

talent J 46

Behavior Problems, corporal punishment

(Ed.) Ja 17

induction of fathers creates special

problems, J. S. Benben Ap 43

need for parent education (Ed.) Mr 18

petting problem (Q.A.) Ap 8

rural school combats delinquency,

H. H. Mosher Ap 26

salvaging juvenile delinquent, A. M.

Pitkanen J 47

teacher and problem child, F. F.

Tallman Ja 31

we can help with discipline (Q.A.) Ap 8

Benben, John S., Induction of fathers

creates special problems Ap 43

Berg, Ahdele, Pictures help bring them

back to school J 20

Better Plant Practices Ja 64; F 62;

Mr 60; Ap 62; My 58; J 60

Board of Education, case for school board

associations, C. Grieder Ja 45

Bottle Run School, Bottle Run, Pa., one room school serves lunch, R.

Taylor F 56

Boushall, Thomas C., Educational use tax Mr 32

Bow, Warren E., Serving returned veteran Mr 32

Brennan, Margaret E., School lunches mean better health J 56

Brinkman, Capt. Albert R., One year too long for military training Mr 27

Brown, Kenneth W., General *versus* unit shop J 44

Building Materials: See Construction

Burke, Arvid J., What's new in state support, Part I Ja 29

What's new in state school support, Part II F 41

What's new in state school support, Part III Mr 46

Bursch, Charles, and Gibson, Charles D., Give parents room at school (P.) F 37

Butterworth, Julian E., National service for youth F 20

We can look for action on rural school problems Ja 47

Campion, Howard A., Youth's leisure time My 23

Cannon, J. W., Jr., Plumbing and heating in postwar schools (P.) Ja 38

Catholic Schools: See Parochial Schools

Chalk Dust Ja 66; F 64; Mr 62; Ap 64; My 64; J 62

Chisholm, Leslie L., Redistricting plan works well Ap 24

Christman, Elizabeth, Women workers after war F 48

Colleges: See Advanced Education

Community Colleges: See Junior Colleges

Comparative Education, Canada lags in use of films, M. P. Toombs J 53

higher education in modern Mexico, G. I. Sanchez J 32

how British schools use radio My 54

modern schoolhouse in Puerto Rico, M. Satterfield (P.) My 34

schools of Normandy carry on, Capt. G. T. Trial Ap 45

seed takes root, D. Schneider Ja 52

urban schools in Puerto Rico, R. J.

Neutra (P.) My 36

we learn about South America, O. E.

Sams Jr. Ja 50

Compulsory Military Training: See Military Training

Coulter, Kenneth C., Impact of war My 32

Construction, brick, ancient material for modern schools, L. B. Perkins (P.) J 38

brick walls leak (Q.A.) F 6

building for preventive maintenance, R. B. Johnson Mr 58

check list of building needs, H. C. Hunt (P.) F 39

common-sense engineering helps, R. B. Johnson J 58

glass in modern planning, T. H. Creighton (P.) Ja 34

See also Designs and Plans

Corporal Punishment: See Behavior Problems

Cox, Clarice, Project stimulates local pride J 28

Crawford, E. Winifred, Midwest pioneers in radio education F 54

Crawford, Will C., National service for youth F 20

Professional morale needs toning up My 31

Creighton, Thomas H., Glass in modern planning (P.) Ja 34

Crosby, Otis L., We're not good salesmen. F 31
Crosby-Ironton Junior College, Crosby,
Minn., adapting old grade school to
junior college use (P.) Ap 39
Curriculum, marriage course needed
(Q.A.) Ap 10
"Postwar Curriculum," R. W. Tyler Mr 41
unified curriculum for Catholic ele-
mentary schools, M. Synon F 32
Custodians: See Maintenance

Delinquency: See Behavior Problems
Designs and Plans, adapting old grade
school to junior college use (P.) Ap 39
check list of building needs, H. C.
Hunt (P.) F 39
give parents room at school, C.
Bursch and C. D. Gibson (P.) F 37
Lakeside Union Elementary School,
F. Wynkoop and Associates (P.) F 34
modern school for Negroes, A. C.
Woodroof (P.) J 35
modern schoolhouse in Puerto Rico,
M. Satterfield (P.) My 34
ours serve whole community, G. C.
Kyte (P.) Ap 32
urban schools in Puerto Rico, R. J.
Neutra (P.) My 36
Designs and Plans: See also Construction;
Postwar Planning
Discipline: See Behavior Problems
Donohue, Francis J., Can public and
parochial schools cooperate My 49
Catholic church and public schools Mr 44
Public aid to parochial schools Ap 48

dimension, J. B., "Gyped!" G.I. Joe
must be protected against low-grade
colleges F 25
National service for youth F 20
Education, bondage through education,
V. T. Thayer My 51
education for useful living in post-
war world, C. E. Wilson J 23
education under fire (Ed.) Ap 17
for my son I want an unpractical
education, G. M. McGranahan Ap 25
sociologist looks at resource educa-
tion, H. W. Odum Ja 22
Eells, Walter Crosby, Junior colleges
are here to stay (P.) Ap 28
Eichler, G. A., Five-point salary schedule J 45
Elementary Education, children need
industrial arts, J. Leavitt Ja 20
induction of fathers creates special
problems, J. S. Benben Ap 43
what size elementary classes (S.O.P.) Ap 42
what teacher-pupil ratio (Q.A.) Ap 8
Elliott, Eugene B., Disadvantages of
area vocational schools Ap 23
Finance and taxation Mr 31
Elsdon, Cyril L., Are your internal
school accounts audited Ap 44
Engelhardt, N. L., Great task remaining. Mr 28
Equipment, plumbing and heating in
postwar schools, J. W. Cannon Jr.
(P.) Ja 38
See also What's New for Schools
Evenden, E. S., Teaching staff problems. Mr 30
Exhibits, how to plan an exhibit,
P. C. Baker Ap 56
Extracurricular Activities: See Activities

Federal Affairs, democratic experiment
(Ed.) Mr 18
unwise suggestions (Ed.) Ap 18
U.S.E.S. offers to assist counselors,
P. V. McNutt Ja 27
your 1945 income tax J 49
Federal Aid, Catholic church and public
schools, F. J. Donohue Mr 44
I propose federal subsidies, A. J.
Stoddard F 28
pattern for federal aid, A. B.
Moehlman My 19
Film Releases Ja 98; F 106; Mr 110;
Ap 106; My 110; J 94
Finance, are your internal school
accounts audited, C. L. Elsdon Ap 44
audit of school accounts (Q.A.) Ap 10
billions needed for postwar schools,
R. L. Hamon (P.) Mr 33
educational use tax, T. C. Boushall Mr 32

FINANCE (Cont.)

financing postwar school construction,
E. T. Peterson (P.) Mr 37
for improving Florida schools, E. L.
Morphet My 52
no promises made (Ed.) J 18
pensions for custodians (Q.A.) Mr 6
retirement plans for nonteaching
personnel, T. G. O'Keefe J 25
tax limitation unwise (Ed.) J 17
undivided school support essential,
A. B. Moehlman Mr 19
what of postwar building reserve
funds, H. N. Rosenfield J 41
what's new in state support, Part I,
A. J. Burke Ja 29
what's new in state school support,
Part II, A. J. Burke F 41
what's new in state school support,
Part III, A. J. Burke Mr 46
your 1945 income tax Ja 49

See also Federal Aid; Salaries
Fitzsimmons, Thomas A., Start with
what you have Ap 52
Foods and Food Service, adventure in
good foods, J. P. Keene Jr. My 60
breakfast at school, H. Allison Mr 57
foods for tomorrow's lunchrooms,
A. M. Macfarlane Ja 56
for better food habits, L. Parham Mr 56
how to plan an exhibit, P. C. Baker Ap 56
one room school serves lunch, R. Taylor F 56
rural schools study nutrition, A. M.
Moser F 57
school lunches mean better health,
M. E. Brennan J 56
Victory gardens (Ed.) F 17
Food for Thought Mr 57
Forrestal, James, Military training is
essential Ja 24

Ganders, Harry S., New York State's
two year schools (P.) Ap 37
Gibson, Charles D.: See Bursch, C., jt. auth.
Goodykoontz, Bess, "Structural Re-
organization of Education" Mr 42
Goslin, Willard E., "Paths to Better
Schools" Mr 41
Grace, Alonzo G., National service for
youth F 21
Youth's interests comes first (P.) Ap 29
Grieder, Calvin, Case for school board
associations Ja 45
Let's experiment in administrative
personnel My 29
Guidance, U.S.E.S. offers to assist
counselors, P. V. McNutt Ja 27

Has, Francis B., National service for
youth F 21
Hamon, Ray L., Billions needed for
postwar schools (P.) Mr 33
Headlines Ja 3; F 3; Mr 3; Ap 3;
My 3; J 3
Health, child health day—1945, M.
Taylor My 43
epileptics employable, H. Yahraes My 50
safety education cuts accidents Ja 42
school lunches mean better health,
M. E. Brennan J 56
send sick child home Mr 48
teacher and problem child, F. F.
Tallman Ja 31
two "O.K. tags" on every child, R. W.
House J 30
we can prevent panic, S. J. Lucas My 28
Heck, Arch O., National service for
youth F 21
Heffernan, Helen, National service for
youth F 21
Higher Education: See Advanced Education
Hill, Adelaide Cromwell (Ed.) J 18
Hill, Henry H., National service for
youth F 22
High Schools: See Secondary Education
House, Ralph W., Two "O.K. tags" on
every child J 30
Howell, Youldon C., We run our schools
on democratic lines Mr 24
Hubbard, Frank W., Salaries for 1944-
45 My 44
Hunt, Herold C., Check list of building
needs (P.) F 39
Interpreting postwar plant program
(P.) Mr 39

Instruction, corporal punishment (Ed.) Ja 17
for my son I want unpractical educa-
tion, G. M. McGranahan Ap 25
let people know (Ed.) Ap 17
marriage course needed (Q.A.) Ap 10
pictures help bring them back to
school, A. Berg J 20
project stimulates local pride, C. Cox J 28
reduce traffic fatalities Mr 45
safety education cuts accidents Ja 42
salvaging juvenile delinquent, A. M.
Pitkanen J 47
sociologist looks at resource educa-
tion, Part I, H. W. Odum Ja 22
sociologist looks at resource educa-
tion, Part II, H. W. Odum F 50
See also Religion
Interpretation, civic answer to cry for
better schools, L. W. Kindred Ja 41
how children read papers, H. R. Long My 20
improved conferences (Ed.) My 18
interpreting postwar plant program,
H. C. Hunt (P.) Mr 39
mass models do selling job, C. F.
Miller (P.) J 34
professional morale needs toning up,
W. C. Crawford My 31
teacher questions schools (Ed.) F 17
"what's right with schools" (Q.A.) F 6
Ivey, John E., Resource education Mr 31

Jameson, Lt. William A., Army re-
habilitates its blind soldiers Ap 20
Janitors: See Maintenance
Jean, Sally Lucas, We can prevent
panic My 28
Jennings, George, Radio in teaching Mr 31
Jensen, Frank A., National service for
youth F 22
Outlook in Illinois (P.) Ap 40
Johnson, Preston C., Art of coopera-
tion F 46
Johnson, Rogers B., Building for pre-
ventive maintenance Mr 58
Common-sense engineering helps J 58
Factors in good maintenance F 58
To facilitate repair orders Ap 58
Junior Colleges, adapting old grade
school to junior college use (P.) Ap 39
close-up of Texas college (P.) Ap 41
community colleges logical next step
in Michigan, L. M. Thurston (P.) Ap 36
four southern states report (P.) Ap 30
junior colleges are here to stay, W. C.
Eells (P.) Ap 28
New York State's two year schools,
H. S. Ganders (P.) Ap 37
ours serve whole community, G. C.
Kyte (P.) Ap 32
outlook in Illinois, F. A. Jensen (P.) Ap 40
what private junior college has to
offer, J. M. Wood (P.) Ap 31
youth's interests come first, A. G.
Grace (P.) Ap 29
Juvenile Delinquency: See Behavior
Problems

Kardatzke, Carl, I am second-mile
educator J 31
Kearney Junior-Senior High School,
Linda Vista, Calif., growth of hous-
ing project school, E. Ortiz Jr. (P.) J 36
Keene, James P., Jr., Adventure in
good foods My 60
Kersey, Vierling, Our next five years Mr 29
Kindred, L. W., Civic answer to cry for
better schools Ja 41
Knight, E. B., Orientation devices for
rural pupils F 43
Knowlton, Daniel C., Pictures help his-
tory My 53
Kuhnle, Veronica, Will guidance counse-
lors supplant deans My 47
KYTE, George C., Ours serve whole com-
munity (P.) Ap 32

Lake, Charles H., Postwar objectives Mr 28
Lakeside Union Elementary School, Kern
County, Calif., F. Wynkoop and
Associates, construction details (P.) F 34
Landscaping, planting needs care, too My 56
Law: See Legal Decisions; Legislation

- Leavitt, Jerome, Children need industrial artsJa 20
- LeBaron, Walter A., What basis for pupil promotionJ 51
- Lee Junior College, Goose Creek, Tex., close-up of Texas college (P.)Ap 41
- Legal Decisions, are our schools really free, H. N. RosenfieldJa 43
- liability for school accidents, H. N. RosenfieldAp 50
- married woman teacher in war time, H. N. RosenfieldF 47
- read your school deed with care, H. N. RosenfieldMy 41
- what of postwar building reserve funds, H. N. RosenfieldJ 41
- Legislation, new Iowa school code proposals, N. D. McCombsAp 51
- Lewis, John W., Delay our decisionAp 49
- Libraries, consolidated school library, M. SettleJa 49
- Lindeman, Eduard C., World peace through adult educationMr 23
- Long, Howard Rusk, How children read papersMy 20
- Long, Raymond V., National service for youthF 22
- Looking ForwardJa 17; F 17; Mr 17; Ap 17; My 17; J 17
- Lyons Township High School and Junior College, La Grange, Ill., we're proud of our cafeteria, E. M. TroegerMy 62
- M**aefarlane, Albert M., Foods for tomorrow's lunchroomsJa 56
- Maintenance, building for preventive maintenance, R. B. JohnsonMr 58
- building up wax surface (Q.A.)Ap 8
- care of electrical equipmentMr 60
- common-sense engineering helps, R. B. JohnsonJ 58
- does paint reduce heatJa 64
- factors in good maintenance, R. B. JohnsonF 58
- pensions for custodians (Q.A.)Mr 6
- planting needs care, tooMy 56
- removing ink from concrete (Q.A.)F 6
- renewing blackboard surface (Q.A.)F 6
- slippery floors (Q.A.)F 6
- time to check equipmentMr 60
- to facilitate repair orders, R. B. JohnsonAp 58
- what books for custodians (Q.A.)F 6
- when you heat with coal, J. J. McCarthyJa 60
- window washing problem (Q.A.)Mr 6
- Marshall, John E., West Virginia's postwar building guide (P.)F 40
- Mason, Isaac, Pledge of youthMr 25
- Master Teacher, Morrison, Henry Clinton, A. B. MoehlmanJ 19
- McCarthy, John J., When you heat with coalJa 60
- McCloskey, Mark A., Schools as soldiers' memorials (P.)Ja 37
- McClure, Worth, National service for youthF 22
- McCombs, N. D., New Iowa school code proposalsAp 51
- McConnell, Beatrice, Summer employment beckonsMy 46
- McGranahan, George M., For my son I want unpractical educationAp 25
- McNutt, Paul V., U.S.E.S. offers to assist counselorsJa 27
- Military Training, delay our decision, J. W. LewisAp 49
- lessons from peace-time conscription in Europe, G. F. MiltonF 26
- military training is essential, J. ForrestalJa 24
- military training is not preparedness, E. R. SifertMr 26
- one year too long, A. R. BrinkmanMr 27
- questions we must answer, F. L. BaconJa 24
- what about work service camps (S.O.P.)Ja 28
- what Michigan schoolmen sayF 24
- See also National Service
- Miller, Chester F., Mass models do selling job (P.)J 34
- National service for youthF 23
- Planning postwar plant program (P.)Mr 35
- Miller, Clyde R., National service for youthF 23
- Milton, George Fort, Lessons from peace-time conscription in EuropeF 26
- Moehlman, Arthur B., Freedom of teaching jeopardizedJa 19
- Morrison, Henry Clinton, master teacherJ 19
- National preparedness issueF 19
- Pattern for federal aidMy 19
- Secondary education in transitionAP 19
- Undivided school support essentialMr 19
- Editorials
- Administration
 - education under fireAp 17
 - G.I. educational rightsMr 17
 - ill-advised actionMy 18
 - our policyJa 17
- Adult Education
- need for parent educationMr 18
- Advanced Education
- racial discriminationMy 17
- Appraisal
- improving Boston schoolsJa 18
- Federal Aid
- democratic experimentMr 18
 - unwise suggestionsAp 18
- Finance
- no promises madeJ 18
 - tax limitation unwiseJ 17
- Instruction
- corporal punishmentJa 17
 - let people knowAp 17
- Interpretation
- improved conferencesMy 18
 - teacher questions schoolsF 17
- Personal
- Barnard, Eunice FullerJa 18
- Personnel
- army actsAp 18
 - sensible decisionF 17
 - Smith College shows wayJ 18
- Philosophy
- "ominous or hopeful"Mr 17
- Politics
- democratic competenceF 17
- Religion
- religious censusMr 17
- State Administration
- control of recreationF 18
 - Florida proposalsJ 17
- Textbooks
- professional ethicsMy 18
 - textbook authorsMy 17
- War
- Victory gardensF 17
- Moffitt, Frederick James: See Chalk Dust Morphet, Edgar L., Florida plans for postwar yearsF 45
- For improving Florida schoolsMy 52
- Morrison, Henry Clinton, master teacher, A. B. MoehlmanJ 19
- Mort, Paul R., New patterns in administrationJ 24
- Moser, Ada M., Rural schools study nutritionF 57
- Mosher, Howard H., Rural school combats delinquencyAp 26
- Music, band time and credit (Q.A.)Ja 8
- N**ames in NewsJa 84; F 82; Mr 82; Ap 88; My 82; J 80
- National Service, national service for youth, 18 viewsF 20
- national service issue, A. B. MoehlmanF 19
- Negro Education, modern school for Negroes, A. C. Woodroof (P.)J 35
- racial discrimination (Ed.)My 17
- Neutra, Richard J., Urban schools in Puerto Rico (P.)My 36
- News in ReviewJa 72; F 74; Ap 78; My 74; J 74
- North, Francis R., and Tompkins, Ellsworth E., New emphasis on moraleJ 49
- Nutrition: See Food and Food Service
- O**dum, Howard W., Sociologist looks at resource educationJa 22; F 50
- O'Keefe, T. G., Retirement plans for nonteaching personnelJa 25
- Orientation, devices for acquainting rural pupils with high school, E. B. KnightF 43
- Ortiz, Edward, Jr., Growth of housing project school at Linda Vista, Calif. (P.)J 36
- P**aram, Lillian C., For better food habitsMr 56
- Parochial Schools, bondage through education, V. T. ThayerMy 51
- can public and parochial schools co-operate, F. J. DonohueMy 49
- Catholic church and public schools, F. J. DonohueMr 44
- public aid to parochial schools, F. J. DonohueAp 48
- unified curriculum for Catholic elementary schools, M. SynonF 32
- Perkins, Lawrence B., Brick, ancient material for modern schools (P.)J 38
- Personnel, adjusting teachers' sights to international horizon, F. E. BakerMr 47
- army acts (Ed.)Ap 18
- militarized teachers, R. D. WilleyJa 26
- new emphasis on morale, F. R. North and E. E. TompkinsJ 49
- retirement plans for nonteaching personnel, T. G. O'KeefeJ 25
- salary differentials as between rural and urban schools, M. B. RogersMy 42
- sensible decision (Ed.)F 17
- Smith College shows way (Ed.)J 18
- suggestions on personnelAp 62
- Peterson, E. T., Financing postwar school construction (P.)Mr 37
- Philosophy, "ominous or hopeful" (Ed.)Mr 17
- Physical Education, fat teachers and exercise (Q.A.)Ap 8
- invigorating physical education program, G. T. StaffordAp 46
- paying for athletic suits (Q.A.)J 6
- Pitkanen, A. M., Salvaging juvenile delinquentJ 47
- Planned for FutureJa 100; F 108; Mr 112; Ap 108
- Plant Operation and MaintenanceJa 60; F 58; Mr 58; Ap 58; My 56; J 58
- Politics, democratic competence (Ed.)F 17
- Polakov, Walter N., Ability to do anything well, goal of vocational educationMy 26
- Portfolios, community colleges (cover page)Ap 27
- schoolhouse planning (cover page)Ja 33; F 33; Mr 33; My 33; J 33
- Postwar Planning, billions needed for postwar schools, R. L. Hamon (P.)Mr 33
- financing postwar school construction, E. T. Peterson (P.)Mr 37
- Florida plans for postwar years, E. L. MorphetF 45
- glass in modern planning, T. H. Creighton (P.)Ja 34
- interpreting postwar plant program, H. C. Hunt (P.)Mr 39
- invigorating physical education program, G. T. StaffordAp 47
- our governors speak on education, H. N. RosenfieldMr 49
- our next five years, V. KerseyMr 29
- planning postwar plant program, C. F. Miller (P.)Mr 35
- plumbing and heating in postwar schools, J. W. Cannon Jr.Ja 38
- postwar objectives, C. H. LakeMr 28
- postwar planning leaders (Q.A.)F 6
- schools as soldiers' memorials, M. A. McCloskey (P.)Ja 37
- West Virginia's postwar building guide (P.)F 40
- what kind of postwar teachers (S.O.P.)My 45
- women workers after war, E. ChristmanF 48
- youth's interests come first, A. G. Grace (P.)Ap 29
- See also Designs and Plans; Planned for Future; Yearbooks
- Potter, Marian, War against childrenMr 20
- Psychiatry, teacher and problem child, F. F. TallmanJa 31
- Public Relations: See Community Relations; Interpretation
- Pupils, lure of big wages (Q.A.)J 6
- pledge of youth, Isaac MasonMr 25
- problem of slow child (Q.A.)Ja 8
- pupils' objection to school, D. T. ArmstrongMr 51
- reduce traffic fatalitiesMr 45
- send sick child homeMr 48
- should pupils drive buses (Q.A.)J 6
- summer employment beckons, B. McConnellMy 46
- tardiness (Q.A.)J 6
- what about lower voting age (S.O.P.)F 49
- youth's leisure time, H. A. CampionMy 28
- Pylman, Jay L., How stable is teaching professionF 30

Questions and Answers
Ja 8; F 6; Mr 6; Ap 8; My 8; J 6

- R**ecreation, control of recreation
(Ed.) F 18
Religion, bondage through education,
V. T. Thayer My 51
let people know (Ed.) Ap 17
religious census (Ed.) Mr 17
teaching religion in public school is
playing with fire, E. O. Sisson J 43
See also Parochial Schools
Resource Education, resource education,
J. E. Ivey Jr. Mr 31
sociologist looks at resource education,
Part I, H. W. Odum Ja 22
sociologist looks at resource education,
Part II, H. W. Odum F 50
Rogers, Don C., Business methods in
administration Mr 29
Rogers, M. B., Salary differentials as
between rural and urban schools My 42
Roos, Carl A., They like "educational"
films F 52
Rosenfield, Harry N., Are our schools
really free Ja 43
Liability for school accidents Ap 50
Married woman teacher in war time F 47
Our governors speak on education Mr 49
Read your school deed with care My 41
What of postwar building reserve
funds J 41
Roslyn Heights Elementary School, Ros-
lyn, L. I., children need industrial
arts, J. Leavitt Ja 20
Roving Reporter Ja 6; F 8; Mr 8; Ap 6; My 6; J 8
Rural Education, consolidated school li-
brary, M. Settle Ja 49
one room school serves lunch, R.
Taylor F 56
orientation devices for acquainting
rural pupils with high school, E. B.
Knight F 43
rural school combats delinquency,
H. H. Mosher Ap 26
rural school consolidation (Q.A.) Ja 8
rural schools study nutrition, A. M.
Moser F 57
small school problems, A. Samuelson Mr 30
we can look for action on rural school
problems, J. E. Butterworth Ja 47

- S**alaries, better salaries will help
(Q.A.) Ja 8
five-point salary schedule, G. A.
Eichler J 45
salaries for 1944-45, F. W. Hubbard My 44
salary differentials as between rural
and urban schools, M. B. Rogers My 42
substitute teachers' salaries (Q.A.) J 6
Sams, Oscar E., Jr., We learn about
South America Ja 50
Samuelson, Agnes, Small school prob-
lems Mr 30
Sanchez, George I., Higher education in
modern Mexico J 32
Satterfield, Minna, Modern schoolhouse in
Puerto Rico (P.) My 34
Schneider, David, Seed takes root Ja 52
School Boards: See Board of Education
School Cafeteria Ja 56; F 56; Mr 56; Ap 56; My 60; J 56
School Opinion Poll, in-service training
for board members Mr 43

SCHOOL OPINION POLL (Cont.)

lower voting age	F 49
postwar teachers	My 45
size of elementary classes	Ap 42
size of high school classes	J 29
work service camps	Ja 28

- | | |
|--|-------|
| Schoolhouse Planning: See Portfolios | |
| Secondary Education, marriage course
needed (Q.A.) | Ap 10 |
| secondary education in transition,
A. B. Moehlman | Ap 19 |
| teacher questions schools (Ed.) | F 17 |
| what size high school classes (S.O.P.) | J 29 |
| Settle, Margery, Consolidated school li-
brary | Ja 49 |
| Sifert, E. R., Military training is not
preparedness | Mr 26 |
| Simpson, Alfred D., National service
for youth | F 23 |
| Sisson, Edward O., Teaching religion
in public school is playing with fire | J 43 |
| Sorgho School, Daviess County, Ky., con-
solidated school library, M. Settle | Ja 49 |
| Spinning, James M., National service for
youth | F 24 |
| Stafford, George T., Invigorating physi-
cal education program | Ap 46 |
| Stoddard, Alexander J., I propose fed-
eral subsidies for buildings and
tuition | F 28 |
| Summerfield Negro School, Guilford
County, South Carolina, modern
school for Negroes, A. C. Wood-
roof (P.) | J 35 |
| Surveys, Nation's Schools Survey (P.) | Ja 38 |
| Synon, Mary, Unified curriculum for
Catholic elementary schools | F 32 |

- T**allman, Frank F., Teacher and prob-
lem child Ja 31
Taylor, Mary, Child health day—1945 My 43
Taylor, Ruth, One room school serves
lunch F 56
Teachers, adjusting teachers' sights to
international horizon, F. E. Baker Mr 47
art of cooperation, P. C. Johnson F 46
better salaries will help (Q.A.) Ja 8
enough teachers, when (Q.A.) F 6
how stable is teaching profession,
J. L. Plyman F 30
interest in reading (Q.A.) Ja 8
married woman teacher in war time,
H. N. Rosenfield F 47
militarized teachers, R. D. Willey Ja 26
professional morale needs toning up,
W. C. Crawford My 31
retain married teachers (Q.A.) Ja 10
salary differentials as between rural
and urban schools, M. B. Rogers My 42
teacher professionalism (Q.A.) F 6
teaching staff problems, E. S. Even-
den Mr 30
unions (Q.A.) My 8; J 6
what kind of postwar teachers
(S.O.P.) My 45
Textbooks, pictures help history, D. C.
Knowlton My 53
professional ethics (Ed.) My 18
textbook authors (Ed.) My 17
Thayer, V. T., Bondage through educa-
tion My 51
Thompson, Anton, War-time tenure of
superintendents J 42
Thorne, Edmund H., Weighted formula
must go My 24
Thurston, Lee M., National service for
youth F 24
Community colleges logical next step
in Michigan (P.) Ap 36

- Tompkins, Ellsworth E.: See North,
F. R., Jr. auth.
- Toombs, Morley P., Canada lags in use
of films J 53
- Transportation, liability for school acci-
dents, H. N. Rosenfield Ap 50
should pupils drive buses (Q.A.) J 6
- Trial, Capt. George T., Schools of Nor-
mandy carry on Ap 45
- Trobaugh, Earl, Use public address sys-
tem to teach broadcasting Ap 52
- Troeger, Elsie M., We're proud of our
cafeteria My 62
- Tyler, Ralph W., "Postwar Curriculum". Mr 41

- U**llin, Chet, Still pictures tell story Mr 52
- Universities: See Advanced Education

- V**eterans, G.I. educational rights
(Ed.) Mr 17
- in high school (Q.A.) Mr 6
- serving returned veteran, W. E. Bow. Mr 32
- Visual Education: See Audio-Visual
Education
- Vocational Education, ability to do any-
thing well, goal of vocational educa-
tion, W. N. Polakov My 26
- Army rehabilitates blind soldiers, Lt.
W. A. Jameson Ap 20
- disadvantages of area vocational
schools, E. B. Elliott Ap 23
- general versus unit shop, K. W. Brown. J 44
- women workers after war, E. Christ-
man F 48
- youth's leisure time, H. A. Campion. My 23
- See also Junior Colleges
- Vocational Guidance: See Guidance

- W**ar, army acts (Ed.) Ap 18
- credit for war service (Q.A.) Mr 6
- impact of war, K. C. Coulter My 32
- lessons from peace-time conscription
in Europe, G. F. Milton F 26
- militarized teachers, R. D. Willey Ja 26
- military training: See Military Train-
ing
- national preparedness issue, A. B.
Moehlman F 19
- Victory gardens (Ed.) F 17
- war against children, M. Potter Mr 20
- Washington News Ja 68; F 66; Mr 64; Ap 66; My 66; J 64
- Weiglein, David E., National service for
youth F 24
- What's New for Schools Ja 95; F 103;
Mr 107; Ap 103; My 107; J 91
- Willey, Roy DeVerl, Militarized teach-
ers Ja 26
- Wilson, C. E., Education for useful liv-
ing in postwar world J 23
- Wood, James M., What private junior
college has to offer (P.) Ap 31
- Woodroof, Albert C., Modern school
for Negroes (P.) J 35
- Wynkoop, Frank, and Associates, Lake-
side Union Elementary School (P.) F 34

- Y**ahrne, Herbert, Epileptics employ-
able My 50
- Yearbooks, American Association of
School Administrators, W. E. Goslin. Mr 41
- National Society for Study of Educa-
tion, R. W. Tyler and Bess Goody-
koontz Mr 41, 42

